

Western University Scholarship@Western

The Organizational Improvement Plan at Western University

Education Faculty

8-16-2020

Engaging Teachers in Agile School Improvement

Lynn Leslie Western University, Lleslie6@uwo.ca

Follow this and additional works at: https://ir.lib.uwo.ca/oip

Part of the Educational Leadership Commons

Recommended Citation

Leslie, L. (2020). Engaging Teachers in Agile School Improvement. *The Organizational Improvement Plan at Western University, 144*. Retrieved from https://ir.lib.uwo.ca/oip/144

This OIP is brought to you for free and open access by the Education Faculty at Scholarship@Western. It has been accepted for inclusion in The Organizational Improvement Plan at Western University by an authorized administrator of Scholarship@Western. For more information, please contact wlswadmin@uwo.ca.

Abstract

This Organizational Improvement Plan addresses a K-6 principal's leadership challenge of engaging teachers in implementing the strategies from the annual school improvement plan in a changing school context. The inquiry questions focus on increasing teacher voice, enabling collaborative professional learning, and facilitating dynamic organizational change. Drawing from complexity theory, School X is conceived as a complex adaptive system that exists within a broader eco-system, with organizational transformation occurring through complex responsive processes where human interactions and diversity are essential for shifting current thinking and behaviors. The principal proposes an authentic/adaptive leadership approach that integrates two change models to develop the Dynamic Innovative Generative change framework to lead teachers in a system-oriented and locally adapted process where teachers participate as leaders and co-creators of school improvement. A collaborative, short-term action planning protocol enables teachers to engage in student-centered, collaborative, and impactful school and practice improvement. This proposed solution addresses the current low level of readiness for teachers to engage in creative and collaborative professional learning. Supporting the principal in implementing the changes in this OIP is a detailed communication plan and strategies for adapting decisions and leading an agile school improvement process.

Keywords: school improvement planning, strategic agility, dynamic organizational transformation, teacher leadership

Executive Summary

This Organizational Improvement Plan (OIP) addresses a K-6 principal's leadership challenge of engaging teachers in implementing the strategies from the annual school improvement plan (SIP) in a changing school context. Planning for school improvement is central to the role of K-12 principals. In response to the government's annual school *Accountability Framework* and *Performance Measurement Cycle*, the School District principals develop yearly school plans to report school results and plan improvement strategies. School plan priorities include faith formation, academics, and wellness. Principals also plan teacher professional development (PD). After school plans are posted to school websites early each school year, principals have a high level of agency for enacting them within their schools. There are no formal review processes or implementation guidelines, and one-time PD sessions are typical in the School District.

School X is situated in a hierarchical, publicly funded education system. Complexity theory underpins the principal's authentic/adaptive leadership lens and dynamic approach to change. In Alberta, K-12 schools are responsible for developing yearly school plans and reporting results as part of the Alberta Education (2019) *Accountability Framework for the K-12 Education System*. The emphasis on external accountability and standardized achievement results contributes to the problem of engaging teachers in school improvement; however, other factors include conflicting education policies, economic recession, increasingly complex student demographics, and limited internal student data and management systems. Inquiry questions focus on teacher autonomy, individual and collective teacher professional learning, and the principal's complex role in facilitating dynamic change. In this OIP, I propose an agile, iterative

school improvement process that enables teacher leadership in student-centered, collaborative, and impactful school improvement. The change drivers and priorities for increasing teacher motivation, capacity, and adaptive leadership are identified, and the organization's readiness for change is informally assessed.

From a complexity lens, schools are viewed as complex adaptive systems and complex responsive processes theory of relating (Stacey, 2011). The Dynamic Innovative Generative (DIG) change framework combines two change models: *Accelerate* (Kotter, 2014) and Triple Diamond Innovation ([Victoria, Australia] Department of Education and Early Childhood Development (DEECD, as cited in Bryk, Gomez, & Grunow, 2011). A critical organizational analysis highlights gaps and informs the solution: collaborative, short-term planning (CSTAP) protocol. The CSTAP facilitates a system-oriented, locally adapted approach to teachers' engaging as leaders of school improvement, developing shared goals and commitment for continuous, collaborative professional learning as part flexible, networked improvement communities (NICs).

A change implementation, monitoring, and communication plan provides an overview of the change strategy. An agile and iterative project management cycle called Scrum is used in this OIP as the continuous improvement cycle. Scrum supports systematic implementation, monitoring, and evaluation of progress through frequent feedback loops A discussion of future considerations concludes the OIP.

Acknowledgments

This doctoral journey would not have been possible without family, colleagues, and friends' support and encouragement. Thank you to my husband, Grant, for his patience and belief in me, especially when I stop believing in myself. My grown children, Megan and Mathew, continue to push and inspire me to grow as a mother, individual, and leader. Without Megan's logical mind and continued guidance, I am not sure I could have done this. Mathew continues to ignite my passion for leading equitable and inclusive change in education. I am forever indebted to Bill and Gladys, my parents-in-law, who provided a home and many meals during our renovations.

Thank you to the co-workers and friends who have influenced my thinking about educational leadership. There are too many people to name here, but I must acknowledge a few. Dr. Gail O'Neill, a principal colleague, showed genuine interest, practical and scholarly advice, and invaluable feedback. Cassandra Novakowski, an extraordinary school administrative assistant, knew just when I needed an encouraging smile or listening ear. Kim Wallace, an insightful teacher leader, endured my impromptu lessons and knew when to slow me down. I am eternally grateful for my fellow Ed.D. colleague, and now friend, Cathy Shellenberg, for encouraging me to persist in the face of the many unexpected challenges that arose in our personal, professional, and academic lives.

To the K-12, 2017 cohort peers and professors for sharing insightful and diverse perspectives. I know that education is in good hands, with passionate, scholarly leaders like them. A special thanks to Dr. Scott Lowrey and Dr. Phillipa Meyers for supporting me in completing the OIP, and to Dr. Runté, who provided editorial assistance.

Table of Contents

Abstract	ii
Executive Summary	iii
Acknowledgments	v
Table of Contents	vi
List of Figures	ix
Acronyms	X
Chapter 1: Introduction and Problem	1
Organizational Context	2
School context.	2
Political context.	3
Economic context.	5
School district context.	6
Leadership Position and Statement	8
Complexity leadership lens	9
Leadership Problem of Practice	13
Framing the Problem of Practice	16
Conflicting political ideologies.	17
Declining school resources	19
Innovation in a culture of accountability	20
Limitations of data and student information systems	21
Guiding Questions Emerging from the Problem of Practice	24
Leadership-Focused Vision for Change	25
Gaps, priorities, and change drivers.	
Organizational Change Readiness	31
Change readiness findings	
Chapter Summary	
Chapter 2: Planning and Development	
Leadership Approaches to Change	
Framework for Leading the Change Process	43

Approach to leading change in School X.	46
Critical Organizational Analysis	49
Gap analysis	49
Changes needed.	57
Possible Solutions to Address the Problem of Practice	58
Solution 1: Strategy Map	59
Solution 2: Collaborative short-term action planning protocol	61
Solution 3: Digital school portfolio	65
Recommendation: Collaborative, short-term action planning protocol	67
Scrum: Incremental/iterative change cycle	69
Leadership Ethics and Organizational Change	70
Blind spots	73
Team dynamics and conflict	74
Power and invisible structures	76
Chapter Summary	77
Chapter 3: Implementation, Evaluation, and Communication Plan	78
Change Implementation Plan	78
Leadership decisions for strategy formation (LDSF).	79
Implementation plan priorities	
Stakeholder reactions and responses.	
Change champions	85
Required resources.	87
Building momentum	87
Implementation risks and mitigation.	89
Change Process Monitoring and Evaluation	91
Agile school improvement process (ASIP).	92
Stakeholder roles and responsibilities.	94
Plan to Communicate the Need for Change and Change Process	
Raising awareness of the need for change	
Communicating the DIG change process.	105
Next Steps and Future Considerations	109

Chapter Summary and Conclusion	111
References	113
Appendices	130
Appendix A: PEST Analysis Framing of the Problem of Practice	130
Appendix B: Organizational Change Readiness Assessment	132
Appendix C: School X Strategy Map Template	133
Appendix D: Collaborative Short-Term Action Planning (CSTAP) Protocol	134
Appendix E: Change Implementation Plan and Scheduled Priorities	135

List of Figures

Figure 1: Dynamic Innovative Generative (DIG) Change Framework	43
Figure 2: Transformation Process. What to change?	50
Figure 3: Leadership Decisions for Strategy Formation (LDSF)	80
Figure 4: Agile School Improvement Process (ASIP)	93

Acronyms

- AERR (Annual Education Results Report)
- ASIP (Agile School Improvement Process)
- ATA (Alberta Teachers' Association)
- CSTAP (Collaborative, Short-Term Action Plan)
- DIG (Dynamic Innovative Generative)
- FAST (Frequently Discussed, Ambitious, Specific, Transparent)
- LDSF (Leadership Decisions for Strategy Formation)
- NIC (Networked Improvement Community)
- OECD (Organisation for Economic Co-operation and Development)
- PD (Professional Development)
- PEST (Political, Economic, Social and Technological)
- PMI (Project Management Institute)
- OIP (Organizational Improvement Plan)
- POP (Problem of Practice)
- SIP (School Improvement Plan)

Chapter 1: Introduction and Problem

Central to a school principal's work is planning and leading continuous school improvement in teaching and learning. However, like many organizations impacted by globalization and the rate of technological advancements, educational institutions are experiencing rapid changes and increased complexity (Nicolaides & McCallum, 2013). This Organizational Improvement Plan (OIP) explores the challenge of using predictable school improvement strategies and strategic management processes in dynamic educational contexts. Drawing from a complexity perspective, I view schools as complex adaptive systems with dynamic organizational change occurring through social interactions and complex responsive processes (Stacey, 2011). As described by Mason (2009), complexity theory provides an alternative perspective in education where organizational change is not predictable; it emerges in social and dynamic interactions and connections within the system. Specifically, my problem of practice (POP) is, how might I, a K-6 principal, engage teachers in implementing the strategies identified in the annual school improvement plan (SIP) when the school context is ever-changing? References to the K-6 school and the school division are anonymized to School X and the School District to protect their identity.

In this chapter, the POP is analyzed and framed within broad contextual factors that contribute to the School District and School X's school improvement planning. Inquiry questions emerging from the analysis of the POP guide the direction of this OIP. From a complexity theory perspective, the leadership lens integrates elements of authentic/adaptive/agile leadership practices to inform a vision for change. This leadership-focused vision presents a future state where teachers are co-creators of agile, continuous school improvement that is student-centered, collaborative, and impactful. The chapter concludes with an assessment of the organization's readiness for change and a discussion of the findings which inform Chapter 2: Planning and Development

Organizational Context

School context. School X is a small K-6 Catholic, publicly funded school facing many changes and challenges. It is one of about 100 schools in the School District, which is located in a large urban center. The school is operationally small, with student enrollment under 150 students. Two years ago, I became the school's principal. At that time, the School Board was considering the school for closure due to declining enrollment. However, student enrollment increased, and the school board delayed its decision.

Over 80 percent of staff are new to the school, position, or profession. Six of the seven classroom teachers are new to the school and are also within their first five years of teaching. The Assistant Principal is new to the school and in her role; she also teaches half time. The Teacher Coach has been at the school for ten years, and last year assumed an official half-time role as a teacher leader in the school. The full-time educational assistant is new to the school.

Close to 60% of students in School X are formally identified as having academic, social-emotional, or English language learning needs. They require additional support through individualized program supports and, if necessary, School District or external agency support. Based on teacher-reported student data, approximately 40% of students are below grade level in reading, writing, or math. Student wellness is also concerning,

with an average of ten students referred to the office each day because of peer conflicts or dysregulated behavior.

Political context. In Alberta, the provincial government's *Accountability Framework*, introduced in 1994, sets the direction for Alberta Education's policies for K-12 education planning and accountability mechanisms to ensure schools are accountable to the Department and the public (McEwan, 1994). Alberta Education (2019) refers to the annual SIP process as the "operationalizing the accountability relationships and processes established in provincial legislation" (p. 2). School boards must maintain Three-Year Education Plans and Annual Education Results Reports (AERRs), and principals must develop a yearly education plan, referred to as the SIP. The SIP must include AERR data and new targets and strategies, along with input from the parent council. The AERR is made available by Alberta Education by October each year, and SIPs must be developed and posted to the school website by mid-November (Alberta, 2019). Hence, the timeline for developing the annual school plan is limited to approximately one month.

Alberta Education's standardized assessments provide the foundation for school plan decisions, and the annual *Performance Measurement Cycle*, introduced in 2010, creates an annual school planning and reporting cycle. For K-6 schools, data used to inform SIP development includes: Grade 6 Provincial Achievement Test results in Grade 6 Language Arts, Math, Science, and Social Studies subjects. Data from the annual *Accountability Pillar* survey, administered from January and March to Grade 4-6 students, Grade 4 parents, and all teachers, is also reported in the SIP. Alberta Education (2010) measures seven education outcomes of school performance: safe and caring

schools, program variety, high-school completion, preparation for work and lifelong learning, community involvement, and continuous improvement.

Another education policy introduced to promote education quality is the Alberta Education (2017) professional quality standards that prepare, supervise, evaluate superintendent, principal, and teacher competencies. In 2017, Alberta updated the teacher standard and introduced principal and superintendent standards, to establish consistent, system-aligned practice competencies and evidence indicators within the education system (Alberta Education, 2017; Alberta Education, 2020a). Principals use the *Leadership Quality Standard* as a guide for effectively leading school improvement.

Alberta Education emphasizes school accountability and standards in policies; however, there is an indication that they value innovation and local decision making. Between the years of 1999 and 2012, the Alberta Initiative for School Improvement provided funding for site-based action research projects to optimize teaching and learning (Parsons & Beauchamp, 2012). Furthermore, in 2018, the NDP Minister of Education conducted a pilot of a Public Assurance Model. This model introduces a new school planning process to reduce red tape and expand "traditional accountability to include a combination of funding policies, processes, actions, and evidence" (Alberta Education, 2020b, para. 2). The Superintendent Association is supporting a move in this direction (MacPhee, 2018). Furthermore, Alberta Education's recently mandated principal and superintendent leadership certification training to include Teaching Sprints, discussed below, as a professional learning model that facilitates an agile, collaborative, continuous learning approach to school and practice improvement (Breakspear, 2020).

In addition to Alberta Education, the Alberta Teachers' Association (ATA) plays a vital role in shaping school improvement decisions, especially those related to professional learning. Principals and teachers are both members of the ATA. In 2017, the ATA formed the Agile Schools Network in partnership with Simon Breakspear. The Network actively promotes agile school and practice improvement methods such as the Teaching Sprints developed by Simon Breakspear (ATA, 2017). Teaching Sprints are a rapid-cycle, team-based method "to support teachers and school leaders in the process of continuous self-improvement and disciplined innovation that will noticeably boost the quality of teaching and learning outcomes across all schools" (ATA, 2017, p. 2). Over the past five years, the Agile Schools' methods have gained momentum in the province and the School District. For example, last year, the School District included the Teaching Sprints flow chart in the SIP template. It is not required, but Instructional Services encourages principals to use this method for implementing their school plans.

Despite the indication of changes in SIP planning and implementation, however, Alberta appears to be similar to many other education systems in the world. As Apple (2004) asserts, education policies often promote neoliberal ideals through management mechanisms that protect the traditional heritage of conservative values, including standards, accountability, and a common core curriculum (Gutek, 2013). The Fraser Institute's ongoing ranking of schools according to standardized achievement results are an indication of the hold that neoliberal ideals have in education policies in Canadian provinces, including Alberta (see, for example, Fraser Institute, 2019).

Economic context. With the drop in oil prices in 2014, Alberta's economy suffered a major recession, followed by a slow recovery in 2017-2019, and now the even worse

recession of the 2020 pandemic. The result is reduced government spending on schools. Grants for reducing class size, specialized program supports, and enrollment growth have all been reduced or eliminated (Ferguson, 2019). Starting in September 2020, Alberta Education reduced spending for the 2020-2021 school year and froze spending for the subsequent three years. The School District is facing a multi-million-dollar reduction in funding, affecting the organization's structure, class sizes, and resources to support school improvement.

School district context. *Religious influences*. The School District develops Administrative Procedures to ensure principals operate their schools and lead school improvement initiatives in alignment with the legal, Catholic, and organizational values and processes (School District, 2016). To maintain a unique identity, Catholic schools ensure gospel values permeate the education of the whole child. For example, Archbishop Miller (2006) describes the purpose of Catholic education as the moral development of citizens who enrich society, love God and their neighbors in their words and actions. Catholic educators go beyond academics and a liberal arts education (Topping, 2015). In the School District, the tenets of the Catholic faith are a central focus.

Also promoted in the organizational culture is a faith-based leadership approach to practice. Our district adopted the concept of *shepherd leadership* ten years ago. Based on Psalm 23 in the bible, shepherd leaders are "gentle, but also tough as nails" (McCormick & Davenport, 2003, p. 1). Shepherd leadership is follower-centered, vision-focused, collaborative, and morally grounded (McCormick & Davenport, 2003). In the School District culture, shepherd leadership provides principals with direction for a supportive and intentional approach to leading change. It encompasses much of the School District

culture. For example, shepherd leadership principles are central to meetings, faith days, leadership PD, evaluations and interviews, professional practice portfolios, and district awards.

School district strategic direction. True to the Catholic culture, the School District's vision, mission, values, purpose, and goals relate to faith, shared responsibility, and excellence in teaching (School District, 2017). They frame the School District priorities and are the main categories in the SIP template, which include student and teacher faith formation, student and teacher wellness, student success, professional learning, and school governance (School District, 2018). Consistent with Baetz and Bart (1996), the School District's mission, vision, and values provide strategic direction to schools and establish a shared purpose to transcend the individual and collective needs. Additional areas of focus are defined in subcategories within each SIP priority area. For example, student success includes the mandated sub-categories of literacy, numeracy, concept-based curriculum, and career and technology foundations.

Organizational structure. The School District has a hierarchical structure and centralized decision-making. The School Board directs the Chief Superintendent, who, through a hierarchical relationship at the district level, works with school and department superintendents, directors, supervisors, and consultants. School principals are responsible for local decisions and provided a small budget to fund day to day operations. However, superintendents make district-wide decisions for school organization, staffing allocation, school plan development, and PD days. The Instructional Services Department manages and leads the school planning process, providing a standardized school planning and reporting template, and PD sessions with supervisors and consultant subject-experts.

Instructional Services also works closely with school-based teacher leaders, including the Teacher Coach. Five of the six allocated PD days provide principals with the opportunity to organize or lead teacher professional learning sessions. There are no district-wide structures or formal practices related to collaborative professional learning protocols. However, Instructional Services encourages shared decision-making (School District, 2016) and the Teaching Sprints method for school plan implementation.

Leadership Position and Statement

As a school principal, my position and agency in the organizational hierarchy require me to lead school improvement initiatives within School X. At the beginning of each school year, Alberta Education's (2019) *Policy and Requirements for School Planning and Results Reporting* provide principals with a reminder of their legal responsibility and direction for developing annual school plans and reporting AERR data. As previously described, principals must also adhere to Alberta Education's (2017) *Leadership Quality Standards*. The School District's (2016) *Administrative Procedures* reinforce the principal expectations and direction for school improvement, including collaboration with teachers when making school decisions.

This expectation is in alignment with Alberta Education's (2017) *Leadership Quality Standard* that defines quality leadership as occurring through the ongoing evaluation of the school context and making evidence-informed decisions to optimize teacher practice and student learning. Furthermore, principals must demonstrate competency in: fostering effective relationships, modeling a commitment to professional learning, embodying visionary leadership, leading a learning community, supporting foundational knowledge about Indigenous Peoples, providing instructional leadership,

developing leadership capacity, managing school operations, and resources, and understanding and responding to the broader societal context (Alberta Education, 2017). Given the legal, moral, and school district directives, my positional power and agency are well established for addressing the POP.

Complexity leadership lens. Complexity theory provides the theoretical lens for how I engage in school leadership. Mason (2009), describes complexity theory as a framework for education that "concerns itself with environments, organizations, or systems that are complex in the sense that vast numbers of constituent elements or agents are connected to and interacting with each other in many different ways" (p. 118). Schools may be complex living systems, complex adaptive systems, and complex responsive processes of relating. In analyzing complex living systems, dynamic interdependencies in the complex processes between people and structures are the focus (Crick, Barr, Green, & Pedder, 2016). In complex adaptive systems, there is some outside control employed to manage the system and provide stability, but only enough to maintain a balance within the chaotic system (Fiden & Balci, 2017). Cohen, Manion, and Morrison (2018) describe the key terms of complex adaptive systems as "feedback, recursion, emergence, connectedness, and self-organization" (p. 27). Third, in complex responsive processes, there is very little outside influence, and knowledge creation and learning emerge naturally through local, everyday interactions where people relate to one another through gestures and responses (Stacey, 2001). These organizational complexity theories highlight the complex nature of schools and organizational change.

I agree with Crick, Barr, Green, and Pedder's (2016) recommendation that school leaders need to be "designers of learning" (p. 3) because of the unpredictable, blurry

middle spaces of leadership. Principals need to balance external demands with internal needs. As Katz, Dack, and Molloy (2018) describe, school leadership occurs "between the decentralized realities of classroom teachers looking to exercise (and learn through) bottom-up professional judgment processes and the centralized efforts of top-down prescription" (p. 16). When designing professional teacher learning, I strive to maintain a productive balance between controlling the process and providing teachers with autonomy. This is not easy to achieve, however, especially with the many dynamic variables and competing demands occurring in schools.

In studying cognitive complexity in school leadership, Da'as, Schechter, and Qadach (2020) assert the school leaders' "ability to differentiate and integrate the dynamic environment—has been shown to be essential to understanding complex and uncertain environments" (p. 398). Similarly, Martin (2018) presents the notion of integrative thinking where leaders bring together two seemingly opposite concepts and generate a creative solution that is better than either of the opposing sides. Katz et al. (2018) refer to integrative thinking framing leadership challenges as *both/and* instead of *either/or* approaches to problems. Hence, when approaching change in the middle space of leadership, I embrace the complexity and strive to discover new ways of designing teacher professional learning.

For over 15 years, I have been intrigued by new ways to learn alongside teachers through collaborative, continuous learning processes that foster creativity and innovation. I am very involved in the Agile School Network (ATA, 2017). Over the past five years I have engaged in summer leadership sessions, piloted Teaching Sprints (Breakspear, 2020) in my former K-9 school, provided two School District workshops, partnered with two

other small K-6 schools to provide teacher PD, and began implementing Teaching Sprints in School X. These experiences have encouraged me to strive for an agile mindset by focusing less on structures and more on encouraging teacher conversations.

Peha (2011) adapted the *Manifesto for Agile Software Development* (Agile Alliance, 2019) for schools. The *Agile School Manifesto* describes the mindset of agile leaders who "have come to value:

- Individuals and interactions over processes and tools
- Meaningful learning over the measurement of learning
- Stakeholder collaboration over constant negotiation
- *Responding to change* over following a plan" (n.p.).

Although all the values in the manifesto are essential, agile leaders value the items on the left more than the values on the right, signaling "powerful leverage for effective school leadership" (Peha, 2011, n.p.). Negotiating these values within the complexity of school improvement work is challenging. Therefore, remaining true to one's core values is essential.

Authentic, adaptive, and agile leadership theories further inform my school leadership work. When viewed through a complexity lens, they provide opportunities to employ integrative thinking and create opportunities for school improvement that otherwise would not be possible. George (2015) states, "authentic leaders have discovered their True North, align people around a shared purpose and empower them to lead authentically to create value for all stakeholders" (p. 8). From a complexity perspective, it vital that teachers participate in professional learning that is responsive to their practical and personal needs. When aligning teachers with a shared vision, one needs more than a structural perspective. Teachers need to be connected logically and emotionally, so they are compelled to engage in the change process (Kotter, 2014).

I believe change will not occur unless we all work together and believe we can make a difference for students. Donohoo and Katz (2020) refer to this as collective efficacy, that "enables quality implementation by positively impacting how teams perceive opportunities (rather than constraints) given their unique environments, set goals, expend effort toward goals, and shape experiences in positive ways" (p. 27). They assert that research shows that collective efficacy is essential for improving student outcomes regardless of socio-economic status. Therefore, through authentic leadership, the possibilities for school improvement are rich with opportunities for developing teacher capacity for responding to the diverse needs of students.

Adaptive leadership reminds me of the importance of balancing positional power, using management tactics, and influential power, through leadership. Robinson (2011) asserts, "leadership is an exercise of influence" (p. 6) that comes from authority, personal characteristics, and relevant expertise. However, Heifetz and Linsky (2017) conclude from their 25 years of supporting school leaders that "educational leaders often fail to appreciate how dangerous and difficult it can be to lead on behalf of what they care about the most" (p. 33). Although not intentional, I acknowledge there are times when I have asserted my authority by prescribing strategies or enforcing a particular professional learning model, without realizing I was using my positional power to do so.

As I continue to grow as a school leader, I appreciate Heifetz's (1994) metaphor about the dangers of leadership work in changing, challenging times. He asserts leadership is dangerous work because it is like walking on the edge of a razor: if leaders

exert too much authority, people may resist, and the leader will get pushed off; conversely, if leaders do not exert enough authority, people will not move, and the leader will lose balance and fall off. Either way, the leader gets cut and blamed for what happened (Heifetz, 1994). For me, this metaphor emphasizes the delicate balance between managing and leading change and how small moves can make a big difference.

Agile leadership is about the small moves one makes that can have a significant impact. Breakspear (2017) maintains that agile leaders do not "expect rapid large-scale transformation whereby deep change happens through one big surge. Rather they aim to make small, critical changes that they can improve through disciplined action" (p. 71). Given the complex nature of schools, I believe school improvement is difficult to predict through predetermined strategies and is not likely to be controlled through authority or management practices. Complexity theory breaks away from predictable solutions and management practices. It replaces them with "organic, non-linear, and holistic approaches, in which relations within interconnected networks are the order of the day" (Morrison, 2006, p. 1).

Leadership Problem of Practice

As described in the organizational context, School X is a K-6 school with a fluctuating staff, low student enrollments, and an increasing number of students with diverse needs. Given the fluid context, engaging teachers in implementing the strategies identified in the annual SIP is challenging.

Some of the challenges stem from the SIP development. The first issue is limited data available for making decisions. The School District places a strong emphasis on the Provincial Achievement Test data, which in the case of School X, is the achievement

results of only 15 to 25 Grade 6 students, depending on the school year. Also, the response rate to the Grade 4 parents' *Accountability Pillar* mailed out surveys is low, so consideration of the results may not be appropriate.

The second issue is the short timeline to develop SIPs. Principals have only a month to input AERR and School District data, engage teachers in analyzing the AERR, and consult with parents before posting the SIP on the school website by the November deadline (Alberta Education, 2019). The short timeline makes it challenging for the principal to genuinely consult teachers and parents.

The third issue relates to time and data. Only one PD day is available for principals to work with teachers to review the AERR and determine improvement strategies. Achievement test analysis takes most of the PD time. Furthermore, the *Accountability Pillar* occurs between January and March (Alberta, 2010); therefore, by the time schools receive the AERR in October, most of the information is almost ten months old. At the one-day School District SIP planning session, principals come together to input the AERR data and discuss strategies to include in the SIP. Best-practice programs and practices, or other ideas shared amongst principals are frequent in SIPs.

After posting the SIP to the school website, several challenges arise. The first implementation challenge stems from the dual-purpose SIP template, which includes both results reporting and school planning in each of the priority areas. The SIP is, on average, 30 pages long. Over the past 15 years with the School District, I notice SIPs rarely get referred to during the year. Given the SIP length and scope, it is challenging to communicate a clear direction for implementing SIP strategies to teachers. Therefore, PD is fragmented. On a positive note, the principal has a high level of agency for implementing the SIPs.

A second implementation challenge is the long review cycle. The School District expects principals to make their school SIPs living documents to guide the school improvement work at schools (School District, 2016). Beyond the annual results reporting and planning cycle, however, there are no formal processes to support the implementation or monitoring of SIPs. There are also no specific guidelines for how principals organize their PD, so principal and teacher experiences vary from school to school.

Third, I have observed that teachers tend to wait for the principal's direction for implementing the SIP strategies. Since there are so many strategies to be implemented, and most are best-practices or programs, teachers participate in the PD, but rarely do I see deep integration in teachers' classrooms. This opinion is supported by Mintzberg (1994), who argues strategic plans often promote pre-determined, best practices that are often ineffective in unpredictable organizational contexts.

The top-down implementation practices silence teachers' voices. Without teacher input, consideration of the current contexts and professional learning needs are limited. Also, the lack of internal school data for SIP decisions limits the voice of students and focuses on external, standardized performance measures. The lack of timely data or a method for collecting it makes it challenging for the principal and teachers to made continuous evidence-informed decisions to support the needs of all students within the school.

The time constraints, data limitations, and lack of guidance for implementing the SIP make it challenging to engage teachers in SIP implementation and monitoring. The

best-practice approach to SIP implementation may not be responsive to current student and teacher needs. This OIP seeks to engage teachers in implementing the strategies in the SIP so that it addresses current teacher and student needs.

Framing the Problem of Practice

Complex problems, like the leadership challenge of engaging teachers in school improvement, are multi-faceted and difficult to solve. By analyzing ill-structured problems from broader contextual factors, Mintrop (2016) explains problem-solvers could uncover some of the underlying political and normative assumptions that contribute to the problem, thus providing valuable insights into how to develop an appropriate solution. Taking the time to frame the problem in this way can provide the leader with a deeper understanding of why the problem exists and minimize unnecessary mistakes like introducing superficial improvement strategies. Heifetz and Linsky (2017) maintain that adaptive leaders need first to consider their assumptions about the problem and consider the diverse perspectives of others before intervening with strategies for improvement. The problem is framed from political, economic, social, and technological (PEST) perspectives (see Appendix A). The factors that contribute to the problem are supported with findings from a brief literature review about the effectiveness of school planning and in consideration for the current School District context. Framing the problem from these perspectives helps to organize the breadth of information about school planning and provides a deeper understanding of the history of the problem. It highlights some recent trends and perspectives about the broader organizational contexts contributing to the problem, along with the dominant change theory and management approach to school improvement. The four broad themes arising from the framing of the problem are

conflicting political ideologies, declining resources, innovation in a culture of compliance, and limitations of data and student information systems.

Conflicting political ideologies. School improvement is the responsibility of local authorities; however, within education policies, what constitutes improvement and how progress is determined is often confusing and conflicting. Apple (2004) argues that neoliberal education policies promote decentralization, competition, and choice. At the same time, he contends, neoliberal policies reinforce the neoconservative values of standardization and accountability. Similarly, Hursh (2015) asserts the rise in neoliberalism has increased management policies in education that reinforce neoconservative values. He also asserts less transparency in policies, questioning whose perspectives, amongst the myriad of levels and actors and levels of society have influenced decisions. This means that although schools have increased autonomy for making local decisions, there is an increase in accountability and pressure for reporting based on government standards. The ideological tensions in education policy demonstrate the conflicting messages and practices in school planning.

The different ideological policies in education have led to conflicting aims of school planning, which is both to provide evidence that schools are effective in meeting the accountability expectations of the government, and in demonstrating continuous school improvement. Schmoker (2004) asserts that conflicting education policies used to operationalize political values through strategic plans have created confusion and a lack of system alignment and clarity. Strategic plans such as SIPs are widely accepted as best-practice management tools that meet the political accountability demands for performance, efficiency and fiscal responsibility through data-driven, results-focused

improvement over time (Dunaway, Kim, & Szad, 2012; Fernandez, 2011; Mintrop & MacLellan, 2002; Strunk, Marsh, Bush-Mecenas, & Duque, 2016). Mintrop and MacLellan (2002) contend that SIPs had only limited utility for school reform. In their research, they argue SIPs most often, "signaled conformance to external policy and served as levers of compliance" (p. 276). The tension between external and internal accountability leads to conflicts about the purpose of school plans, raising questions about the purpose of SIPs as accountability management tools or guides for improvement.

Furthermore, the recent changes in the political parties in the province have led to shifts in educational priorities over the last four years. These shifting education policies increase leadership complexity and create competing demands and uncertainties for what principals will need to consider when making decisions about school improvement. Over the past five years, there has been an overhaul of the entire Kindergarten to Grade 12 curriculum with further plans to move from an outcome- to concept-based curriculum. In addition, new professional leadership standards espouse to better align the education system and associated competencies of superintendents, school leaders, and teachers (Alberta Education, 2017). With the recent shift back to a conservative government, there is uncertainty about the extent to which these recent policy changes will impact schools. The new professional standards have passed in legislation, so they are likely to remain. However, the curriculum review is halted, and there is now a renewed focus on foundational skills and school accountability for performance through standardized testing, that is likely to expand to all elementary grades instead of only Grade 6. In this turbulent political landscape, the principal will need to navigate competing political tensions and changing expectations.

Declining school resources. From an international perspective, many education systems are affected by economic challenges. The Organisation for Economic Co-operation and Development (OECD) (2013) report that during the 2008 global financial crisis, over one-third of the OECD countries reduced spending for education, reduced teacher compensation, and required efficiencies in schools. The reduction in teacher compensation may hurt attracting high-performing people to the profession, and thereby increase the demand for training and resources (OECD, 2013). The effects of these reductions in education funding may lead to additional strain on school resources, prompting the need for the principal to employ school improvement strategies in an efficient and effective way.

Alberta Education has frozen education funding for the next three years, with no additional spending for student enrolment growth in the upcoming school year. As a result, the School District is facing a multi-million-dollar reduction in funding. This has impacted the School District's organizational structure, class sizes, and supports to assist the school in meeting increasing students with diverse needs. The funding reduction and freeze also means there is less money for schools to support school improvement initiatives

There is no doubt that the principal will continue to face increased challenges when engaging teachers in professional learning activities and providing the necessary resources to support school improvement initiatives. Creativity and innovation will be necessary for principals and teachers to find new ways to engage in effective school planning and improvement.

Innovation in a culture of accountability. The historical, traditional approach to school planning promotes a culture of compliance that limits the opportunities for schools to be innovative and responsive communities of practice. Strategic management principles perpetuate a culture of compliance and control through top-down management of organizational change. Mintrop and MacLellan (2002) assert school plans most often "signaled conformance to external policy and served as levers of compliance" (p. 276). As part of new professional practice standards, school leaders must attend PD to receive their permanent certification that sets out expectations that principals create communities that are inquiry-focused and evidence-informed collaborative communities (Alberta Education, 2017). The PD structures and routines to support building teacher capacity focus on individualist, expert-driven practices, and one-time sessions. Hargreaves and Fullan (2012) argue that episodic PD and job-embedded professional learning fails to make a difference to system success. They contend one-time PD does not develop "cultures of collaborative professionalism [that] simultaneously serve[s] individual learning needs, school-based professional communities and societal priorities" (p. 8). Professional learning opportunities need to accommodate the diverse needs of teachers and their students. Teachers require choice in their PD, allowing them to learn what works for their unique circumstances.

In the literature, there appears to be a shift in organizational transformation theory, from a top-down strategic management approach to a need for a bottom-up approach. With this change, principals are facilitators who provide the leadership necessary to build teachers' collaborative capacity to be leaders of school improvement through innovative and experimental processes. From the perspective of complexity theory, Stacey (2011)

note that, since organizational change is difficult to predict and control, leaders cannot control change through formal plans and instead should focus on the interactions and joint action of the people within it. To foster innovation, Bryk, Gomez, and LeMahieu (2015) highlight the potential of people connecting through networks within a system to accelerate learning. They contend, "when many more individuals, operating across diverse contexts, are drawn together in a shred learning enterprise, the capacity grows exponentially" (p. 143). To spark innovation and creativity, Martin (2018) asserts teachers need to be empowered to be co-designers of their learning experiences and continually evolve as they meet the needs of their students with the support of their community and colleagues.

Furthermore, the term strategy is shifting from a noun to a verb, signaling the developmental aspect of strategy implementation. Instead of being referred to as strategic management and strategy execution, there are new terms for the word strategy like strategic innovation (Sammut-Bonnici & Paroutis, 2013), strategic agility (Kotter, 2014) and strategic doing (Morrison, Hutcheson, Nilsen, Fadden, & Franklin, 2019). Yamaguchi, Avery, Cervone, DiMartino, and Hall (2017) assert that schools are both technical and adaptive systems, so a balance between top-down strategy management and bottom-up strategy development is necessary. Hence, the principal will need to strive to determine the balance between top-down and bottom-up approaches to school improvement.

Limitations of data and student information systems. There is a wealth of data available in today's information world but organizing it and using it to inform timely decisions is not well supported within current systems and processes. Mandinach and

Jimerson (2016) identify practical issues to overcome in schools to promote evidenceinformed decision-making. They assert principals and teachers need to distinguish between data literacy and assessment data, data security, and the need to look beyond test results and performance data. Furthermore, Wayman and Jimerson (2014) conclude that teachers need contextualized data that is coherent, engaging, credible, timely, resourced, and followed-up. They assert teachers need to develop data literacy skills that involve questioning, integrating with curriculum, analyzing, and interpreting, classroom linkages, computer skills, and collaborating.

Without real-time data, systems to increase access and manipulation of student information to facilitate efficient approaches to evidence-informed practices, strategies for ongoing analysis, and intervention decisions will continue to be manual and timeconsuming. For schools to foster positive learning environments for all students, accurate data and reliable information systems are needed to diagnose obstacles and make informed and timely decisions (Faubert, as cited in OECD, 2012). Breiter and Light (2006) add that an information management system is necessary to support ongoing and relevant school-based decisions. However, they contend, student information systems should be built from the bottom-up based on teacher needs and insights. With the plethora of information in schools, data management to support local decision-making is challenging. The OECD (2012) stresses the importance of improving equity for disadvantaged students through supportive school conditions like comprehensive data and information systems that help to diagnose and identify students struggling and the reasons for disruptions in learning (OECD, 2012). They recommend that schools need not only system-level data but data that support teacher and student learning. Student information

systems are currently geared toward reporting student information and would need to change to accommodate school-based, real-time data-informed decisions.

Evidence-informed decision-making is a complex process, and knowing what data is needed is different for different levels in the organization and at different times (Breiter & Light, 2006). Schildkamp and Kuiper (2010) describe data decision making as a systematic analysis of data through a variety of sources, with decisions applied to improve teaching and learning and to evaluate the impact of interventions and innovation. They assert that teachers need access to classroom data to make decisions that improve student learning and teaching practices. In contrast, principals need data related to schoolbased performance to support the process and to provide resources. However, the process of data analysis is complex. Marsh and Farrell (2015) do not see data use as a linear process but as a messy and iterative process. They state effective data use requires "critical thinking skills, innovation, a dogged determination to inspect ourselves and our contexts and to play the role of educational detectives to seek out root contributors to student (and system) underperformance" (p. 5). Waynam and Jimerson (2014) assert that research about the necessary processes and structures to support teachers' competency in data use is limited.

When engaging in data sharing in schools, teachers must feel supported by the principal. Schildkamp and Kuiper (2010) conclude that schools more effectively used data when their leaders were enthusiastic, supportive, and stressed the importance of using data through a clear vision and established norms and goals. They emphasize relational trust between leaders and teachers is critical when discussing data. Like Streifer

(2000), they found it challenging for leaders to respond to data to support decision making due to the varied needs of teachers.

Streifer (2000) asserts too much of a leader's time is wasted on collecting, organizing, and analyzing data related to the problem instead of generating insights for decision-making. With technology advances in the business world for complex project management projects, there are new workflow information systems like Trello that support the organization of extensive amounts of information available and provide bottom-up collaborative sharing of evidence and continuous data management (Trello, 2020). These programs can streamline the complexity of school improvement decisions and support continuous and collaborative uses of data.

Guiding Questions Emerging from the Problem of Practice

The framing of the problem of engaging teachers in school improvement raises several inherent complexities and challenges the principal must address. The following questions further guide the inquiry and orient the focus of this OIP.

At the heart of teaching and learning is the capacity of teachers and leaders to meet the needs of students. In an extensive research study in 97 countries, Timperley (2011) asserts that professional learning needs consider the complex activities and moment by moment decisions that teachers make in their practices. She explains many factors contribute to teacher capacity for improving their learning, including "teachers' knowledge and their beliefs about what is important to teach, how students learn, and how to manage student behavior and meet external demands" (p. 6). How might school improvement efforts be more inclusive of teachers' perspectives and voice, and connected to their increasingly complex work and diverse student needs?

The economic and social factors influencing the problem require teachers and principals to be more efficient and effective with growing demands from increasing student needs and decreasing resources. Given the rate of change and increasing complexity in schools, leaders are no longer the heroes with all the answers (Heifetz, 1994; Fullan & Quinn, 2016). What is needed is new processes to create cultures of growth, optimize collective intelligence and talent, and gain commitment for new pathways to improvement (Fullan & Quinn, 2016). To do this, Hargreaves and O'Connor (2018) emphasize that teachers must collaborate and exchange knowledge and expertise, but in an intentionally organized, evidence-informed way. How might I enable the conditions for individual and collective teacher leadership for student-focused, evidenceinformed school, and practice improvement?

The emphasis on school plans as accountability tools and the use of standardized data has created a culture of external compliance and hierarchical, strategically managed approach to school improvement. However, there is a trend toward strategy as a developing process enabled by innovation and creativity. As previously stated, schools are technical and adaptive systems, so leaders need to know when to use their authority and when to empower others (Yamaguchi et al., 2017). In seeking to rebalance the predominant top-down approach to school improvement, how might I shift the current SIP process from one that is strategic management to one that empowers teachers to be leaders of their learning, and co-creators of change through innovative practices?

Leadership-Focused Vision for Change

Informed by a complexity perspective, an authentic/adaptive/agile leadership approach envisions a future state of school planning where teachers are highly engaged in

school improvement. Stringer (2013) argues capacity building for school improvement is hard to conceptualize because of the many external and internal influences. As highlighted in the framing of the problem, several underlying assumptions impact the problem, including a history of external accountability, a shifting political landscape, and data limitations. In contrast, school improvement needs to focus on student-centered practices that are collaborative, impactful, and responsive to school life's everyday realities. To address the gap in the current SIP process and address the underlying challenges, a vision for change includes an agile, responsive approach to school improvement that is student-centered, collaborative, and impactful.

The current SIP process promotes school improvement from a systems management perspective, and the external focus makes it challenging to respond to current student needs. Knapp and Feldman (2012) point out the challenge of school leaders who need to foster internal accountability for school improvement, while at the same time, adhere to the external accountability demands. They assert the tendency for principals and teachers to align their practices on external measures for school effectiveness. Therefore, it is essential to look for ways to improve internal accountability for teaching and learning in the school district. In contrast, Robinson (2011) points to student-centered leadership that focuses inward on developing relationships, building a strong instructional program, and solving complex problems.

Authentic leaders develop trusting relationships based on honesty and mutual respect is the basis for empowerment where leaders "treat others as equals, listen actively, learn from people, share life stories, and align around the mission" (George, 2015, p. 226). Trust provides the foundation for empowering teachers to persevere in their efforts

to address the demands of their work. With increasing numbers of students with diverse learning needs, teachers need confidence that they can make a difference for all their students. Empowerment occurs when people have the confidence, professional freedom, capacity, and support for making their own decisions (Ciulla, 2014). To create school improvement, Bryk et al. 2015 suggest a triangulation of system, school, and student data is necessary to inform school improvement decisions. However, the focus on performance measures as the primary source of information limits a teacher's ability to make informed decisions about school improvement.

Furthermore, solving complex problems through a strong instructional program is essential for internally focused school improvement. Robinson (2011) asserts the need for schools to build a culture of evidence-based inquiry and improvement because evidence fosters an inquisitive mind, necessary for finding creative ways to address student needs. Bryk et al. (2015) contend that school improvement is user-centered and specific to the context. Instead of focusing on one-time performance data, he asserts it is critical to look at the variances in the data. Progressive inquiry about student learning is essential for continued school improvement and builds the capacity of teachers to respond to their students' needs (Bryk et al., 2015; Donohoo & Katz, 2020). In addition to building individual and collective teacher capacity, monitoring and reflecting on the school program is necessary to promote real-time decision making and intervention at the school, team, and teacher levels (Halls, Child-Bowen, Cunningham-Morris, Pajardo, & Simeral, 2016). At the heart of this OIP is empowering teachers in building their individual and collective capacity by helping them to adapt to the challenges they face in changing their beliefs and practices when trying to improve student outcomes.

Gaps, priorities, and change drivers. The guiding questions provided a starting point for identifying the current gaps between the envisioned future-state of school planning that is student-centered, collaborative, and impactful. In each of the three inquiry areas, I identify gaps, priorities, and change drivers.

Teacher autonomy. The current PD approaches are traditional, and one-time sessions focused on developing teacher knowledge and skills around best practices regardless of their professional needs. They are rarely long-term inquiries or teacherdriven. As Fong (2006) points out, teachers may acquire some new ideas and effective practices in these workshops but are likely to encounter difficulties when trying to apply them in their classrooms. She contends, "embedded behaviors are not easily changed, and old practices are often obstacles to new ones" (p. 2), which may be reinforced or resisted because of existing school structures and practices (Fong, 2006). The priority is for teachers to engage in self-organizing, teacher-driven learning that is enabled by increased connectedness, free-flowing conversation, teacher voice, productive feedback, and collegiality (Fong, 2006). To help teachers develop the professional capacity for continued improvement, a priority will be to increase teacher autonomy and choice in professional learning related to their current contexts and learning needs.

Collaborative capacity. The second area of concern that needs to be addressed is the limited capacity of teachers to work collaboratively and share leadership for school improvement initiatives. Currently, teachers have not had a lot of experience or exposure to collaborative practices, and traditional approaches to PD have perpetuated the dependency on the principal to direct and guide them. During turbulent times, this reliance on leaders is a typical response for people who cling to deeply ingrained images

of heroic leaders who are perceived as having the solutions to bring stability to the organization (Heifetz, 1994; Bolman & Deal, 2008). With the long organizational history of the principal being the change leader, it will be necessary for the principal to become a co-creator and participant in the change with teachers.

Given the potential of collaborative work to move teachers forward in their practices, it will be a priority for the principal to recognize the readiness and potential distress and resistance of teachers engaging in collaborative leadership for learning. As Lewis (2019) asserts, collaborative structures that support ongoing dialogue and sensemaking activities can help to shape how teachers perceive the changes and their responses to it. Although this is ideal, Hargreaves and O'Connor (2018) note that collaborative professionalism embedded into the school culture requires "rigorous planning, deep and sometimes demanding dialogue, candid but constructive feedback, and continuous collaborative inquiry" (p. 5). This shift in culture will demand more of teachers, expecting them to move beyond their current teaching practices to engage in collaborative, transparent, conversational spaces where interactions may lead to experiential tensions and personal stress.

As a driver of creative, collaborative school improvement, the principal will need to foster safe spaces for teachers to consider others' perspectives and to take risks in their practices. When considering teachers' diverse classrooms, it is not likely that there will be simple solutions found to address the many complex needs of students. A safe space for learning will promote an experimental, trial and error approach to student-focused professional learning. Edmondson (2012) emphasizes psychological safety in organizations is essential for teams to understand that learning from failure is necessary for successful change. Teachers need to be encouraged to be open about what they are learning and to share where they are struggling.

Leading for impact. Throughout the school year, the principal faces many competing demands and ensures that emerging priorities are addressed. This is in addition to ensuring school improvement is occurring at the local and organizational levels. Schmoker (2004) claims from his many years of supporting system and schools that strategic plans often resulted in disjointed and incoherent work and rarely achieved their intended impact, asserting that "system overload may be the biggest threat to genuine improvement" (p. 427). Since the current school plan is over 30 pages long with many outcomes, it is a priority that the document and strategies within it be streamlined. This will help to focus on the essential outcomes and to communicate a clear direction to teachers.

However, the principal will need to also make sure that local actions are aligned with system goals to sustain focused, impactful school improvement. System alignment ensures the teachers' collaborative work is not only responsive to current school needs but also aligned with the school plan outcomes to show evidence that progress is being made. With the current emphasis on external accountability, however, a balance between external and internal responsibility is necessary. Either way, there needs to be a sense of direction in the current SIP process. Fullan and Quinn (2016) describe focusing direction as one of four essential drivers in leading organizational change, where purpose-driven, impactful goals, and clarity of strategy are crucial. Hence, an intentional systemic focus on aligning local actions with organizational outcomes may help streamline the overburdened school plan, mitigate the challenges of competing demands and emerging priorities, and provide the necessary internal and external accountability to demonstrate evidence of improvement.

Organizational Change Readiness

Before planning and developing the changes envisioned in the previous section, it is important to pause to reflect on the readiness of teachers to engage in change. When introducing changes to current practices, teachers may react differently based on their readiness for change. In high accountability systems, teachers are likely to comply with implementing SIPs despite the loss of autonomy, hence have superficial understandings of the necessary changes (Mintrop & MacLellan, 2002). On the other hand, when people are asked to change their current practices, they may react with dramatic and immediate resistance (Holt, Bartczak, Clark, & Trent, 2017). Additionally, Lewis (2019) contends followers' resistance may be subtle. Conducting a readiness assessment informs the leader of potential responses that may be mitigated before introducing the change.

Armenakis, Harris, and Mossholder (1993) distinguish organizational readiness from resistance. They maintain change readiness involves understanding organizational members' beliefs, attitudes, and intentions about the change. Oreg, Vocala, and Armenakis (2011) provide a helpful way of conceptualizing change readiness. They explain leaders should consider antecedents, reactions, and consequences to change. At times, it is easy to only consider the potential reactions of people without first considering their readiness for change that is the antecedent to their response. In understanding teachers' change readiness, consideration of all three elements is necessary.

Researchers identify the change readiness factors most influential in successful change implementation. Lewis (2019) asserts readiness is "a compilation of stakeholder

beliefs about the necessity and appropriateness of the change combined with beliefs that the change can be accomplished and will be beneficial" (p. 240). Holt, Armenakis, Feild, and Harris (2007) assert for people to exert the necessary energy to engage in changing their current practices, they need to believe the change is necessary, implementable, beneficial for individuals and organizations, and supported by the organization's leaders. Weiner (2009) provides the possible contextual factors influencing change efforts, including organizational culture, policies and procedures, past experiences, resources, and structures. Further describing some of these readiness factors, Cawsey, Deszca, and Ingols (2016) include people's confidence in and skill of leaders, access to information, and rewards and measurement systems. Finally, Weiner (2009) contends successful organizational change requires a sense of shared readiness and collective efficacy, belief that together, change is possible.

Change readiness assessments can provide leaders with an opportunity to identify any gaps they have in their beliefs about the change and organizational members (Holt et al., 2007). Change readiness can be assessed in a variety of ways, and several factors need to be considered. Lewis (2019) describes readiness as "a compilation of stakeholders beliefs about the necessity and appropriateness of the change combined with beliefs that the change can be accomplished and will be beneficial" (p. 240). Other readiness factors to be considered include organizational culture and structure, confidence in and skill of leaders, access to information, rewards and measurement systems, resources, and alignment with the change (Cawsey et al., 2016). To help leaders assess the change readiness of their organizations, Cawsey et al. (2006) developed a questionnaire reflecting the dimensions and levels of change.

Change readiness findings. To gain insight into the School District's readiness for change, Cawsey et al.'s (2016) *Rate the Organization's Readiness for Change* questionnaire was used as an informal assessment of the School District and School X teachers. Even though the questionnaire is not conclusive, it is informative. As Self (2007) asserts, a deeper understanding of change readiness can provide insights into areas to address, or capitalized on, before introducing the change.

The School District's change readiness assessment indicates that the organization is ready for change. With a total score of 17 points, it is above the score of ten that Cawsey et al. (2016) contend is a positive organizational readiness for change. The School District has a low to moderate level of change readiness because of previous change experiences, rewards for innovation, and measures of accountability. In contrast, it has a high level of readiness due to credible leadership, change champions, and openness to change.

In the high level of change readiness areas, it is essential to build momentum on the strengths. Working form people's strengths provides a positive, appreciative approach that motivates people to engage in change (Kotter, 2014; Luthans & Avolio, 2003). When assessing the readiness factors of executive support, credible leadership, change champions, and openness to change, I am not surprised there is a high level of readiness in these areas. Cawsey et al. (2016) describe the indicator of readiness in these areas as related to whether senior leaders are credible, trustworthy, empowering, and supportive of change. The recent changes in district leadership include the appointment of a new chief superintendent who is promoting a more straightforward school plan, school-based decisions, and innovation. Also, the reduction and reorganization of central office staff demonstrate the Chief Superintendents' commitment to shared leadership and

prioritization of student and teacher needs. The School District is moving away from what Stacey (2010) asserts is the organizational design of control and management to a participatory perspective where people are members of networks and unpredictable, selforganizing processes that unleash their creativity.

Therefore, it makes sense that in the School District, there is also a high level of openness for change. Openness to change is related to scanning mechanisms, focus on root problems, multi-directional communications, the value of diversity and conflicting opinions, fostering innovation, and viewing change as appropriate and necessary (Cawsey et al., 2016). There is an openness for change at both the senior leadership level and the school level. One of the strong readiness for change is communication. In the School District, there is good communication at all levels with opportunities for a teacher from each school to meet three times a year with senior leadership and the School Board. When considering the perspective of teachers, I have observed first-hand teachers' eagerness to participate in collaborative professional learning. Oreg et al. (2011) conclude "a participative and supportive process, with open lines of communication, and management that is perceived as competent and fair in its implementation of the change is effective in producing positive reactions toward the change" (p. 33). The teachers in School X positively share their ideas for school improvement, analyze achievement results, and provide feedback on the principal's drafted version of the school plan. When provided with opportunities to collaborate with peers using the Teaching Sprints model, teachers have participated. However, after two years, I have found teachers not independent or self-starting in their professional learning. Also, the collaboration time is often externally,

or teacher practice-focused, and not on continuous improvement through evidenceinformed practices.

I suspect the top-down, externally focused, data literacy gaps contribute to the low and moderate levels of readiness indicated in the areas of rewards for change, measures of accountability, and previous change experiences. In the past, the hierarchical approach to school improvement has promoted a belief that change is linear and predictable. Schools are typically rewarded for how they have implemented SIP strategies initiated from the district, with limited recognition to schools for bottom-up innovations or change. However, Lipton and Wellman (2012) attribute the prioritization and emphasis on the yearly analysis of quantitative data to the gaps in principal and teacher data literacy skills. Standardized data does not promote a continuous process of professional inquiry using data to inform decisions. Donohoo and Katz (2020), however, argue that simply implementing evidence-informed practices in schools does not mean they will work or help teachers achieve the "innovative and long-lasting changed needed to positively impact success for all students" (p. 4). To build capacity in data literacy and evidenceinformed practices through ongoing school improvement and shared leadership, teachers need a "clear purpose, safe structures, and compelling data that present vivid images of the effects of teachers' work" (Lipton & Wellman, 2012, p. 2).

Overall, the organizational stakeholders at the district and school levels are ready for change. The strong readiness indicators show an openness for change and senior leaders who would support it. At the same time, low readiness levels demonstrate the importance of considering the historical and contextual factors that influence change. Armenakis, Harris, and Feild (2000) contend a history of changing political landscape and

increasing global demands for competitiveness causing an accelerated rate of change, leaders are expected to change almost every function of the organization, so when introducing changes, they need to make sure people do not just think it is another fad that will soon go away. Kotter (2014) argues when people resist change, it is tempting for change agents to blame them instead of acknowledging "the problem is systemic and directly related to the limitations of hierarchy and basic managerial processes" (p. 9). The current school planning process has been in place for over 20 years, and traditional practices are deeply entrenched within the government and organization. Considering the rate of change and increasing pressures in schools from new expectations and growing student needs, this OIP aims to be a sustainable solution that helps to move the organization forward in important and appropriate ways.

Change readiness is advanced when organizational members can see how the existing alignment is getting in the way of producing better outcomes and believe that realignment can be achieved (Cawsey, 2016). This means that when introducing teachers to changes in the SIP process, it needs to be about more than just aligning people with policies, practices, and resources. When school leaders implement government policies in complex school environments, Honig and Hatch (2004) assert there are policy-practice gaps that limit the practical and necessary responses for impactful school improvement. They advocate an alternative view where coherence is reconceptualized, "not as an objective alignment of external requirements but as a dynamic process" (p. 16). From a social complexity perspective, Letiche, Lissack, and Schultz (2011) describe coherence as a sense-making process that brings unity and a sense of whole between parts of a system.

In developing a deeper understanding of the antecedents that may impede or promote teacher coherence in the SIP process, change readiness can provide insights.

An assessment of the organization's change readiness can help change leaders mitigate the risk of unknowingly perpetuating top-down implementation practices, so a shared readiness for change and contextualized improvement strategies are introduced that meet the practical needs of teachers.

Chapter Summary

Chapter 1 provides a broad overview of the organizational context and an in-depth analysis of the problem of engaging teachers in implementing the strategies in the SIP within a changing school context. The principal is positioned as a middle leader in the organization, whose practices are informed from complexity theory that views schools as a dynamic organization with multiple variables, people, places, and processes (Honig, 2006) to consider when planning for school improvement. A PEST analysis raises concerns about teacher autonomy in accountability systems, collaborative professional learning practices, and coordinating a multi-faceted school plan implementation process. The chapter concludes with a leadership vision for change that aspires to see teachers fully invested participants and co-creators of agile school improvement. Although this vision may have emphasized the importance of alignment, the chapter's change readiness section also emphasizes the need for coherence. Through a complexity leadership lens, coherence is essential for fostering a deep, shared commitment for change and the collective capacity to make sense of the competing demands and vast priorities in school improvement work. This chapter's in-depth analysis of the problem provides the foundation for developing a change strategy for addressing the POP.

Chapter 2: Planning and Development

This chapter introduces the leadership practices, change framework, and possible solutions for addressing the leadership challenges identified in the analysis of the problem related to engaging teachers in implementing school improvement strategies. Also, a critical organizational analysis highlights the gaps in the current situation that need to be addressed to move the change plan forward. The chapter concludes with a consideration of the ethical implication of introducing the proposed change.

Leadership Approaches to Change

In this section, a comprehensive approach is established to engage teachers in implementing the strategies in the annual SIP within their changing context. A comprehensive leadership approach provides strategies to break away from status quo practices and foster a collective capacity for change (Cohen et al., 2018). Adaptive and agile leadership mobilizes teachers' efforts to face the complex nature of their work (Heifetz, 1994). It facilitates a process that does not overwhelm teachers. Instead, agile leadership encourages small steps, collective action, and frequent monitoring to build momentum as new learning emerges (Breakspear, 2017). Authentic leadership builds teachers' emotional capacity for change. It encourages teachers through a positive orientated approach that builds on their strengths and talents (Luthans & Avolio, 2003). A positive approach provides teachers with the emotional capacity to develop collective efficacy, which shapes the way they set goals and exert efforts in implementing them.

Authentic leadership: Creating a shared vision. With the focus on building the capacity of teachers to engage in agile school improvement, Luthans and Avolio (2003) contend that an essential responsibility of authentic leaders is to develop a shared vision

around the organization's mission and values. The espoused values in the School District (2017) include moral guidance, the dignity and worth of all, and the centrality of shared responsibility and stewardship in educating students to be socially just, contributing citizens in a global society. The school plan template, which defines the District's priorities for schools, is organized by these values. Although the template provides a vision for moving forward, it is each leader's responsibility to create with staff a plan for the improvement of students in their schools. In this circumstance, individual schools' plans often resemble the design of policy requirements instead of what will produce successful improvement for students.

Given the diverse student needs in School X, developing a shared vision for change requires more than teacher compliance with change for student improvement based on a strong professional belief; they need to understand and engage in the difficult work of effecting positive change. To create this engagement, teachers need to feel supported and motivated. Donohoo and Katz (2020) assert that teachers' beliefs influence their practices: teachers may be quick to blame external factors or lack the confidence to support students effectively. Quality implementation takes into consideration teachers' capacity and requires collective efficacy to persevere through challenging circumstances (Donohoo & Katz, 2020). Luthans and Avolio's (2003) Positive Authentic Leadership approach draws on positive psychology, with leaders recognizing peoples' strengths and talents and finding ways to build on those. It provides teachers with hope, optimism, and resilience (Luthans & Avolio, 2003). Like other Alberta teachers who report a high level of workplace stress due to increasing workload and high student needs (Alberta Education, 2015), School X teachers face many competing demands and student

challenges in their day to day work with students. Promoting a positive outlook and building on teachers' strengths creates a sense of possibility, setting the stage to overcome negative beliefs and developing an authentic, shared vision for change.

Adaptive leadership: Diagnosing challenges. School plans need to be reviewed to determine if the strategy identified is appropriate for the context. Heifetz, Grashow, and Linsky (2009) assert that a common reason for leadership failure is when adaptive challenges are treated as technical problems. Technical challenges are easy to define, and there are known skills or knowledge to solve them; however, adaptive challenges are not easily defined or straightforward to solve, so learning in context is required (Heifetz et al., 2009). Schools most often face technical/adaptive challenges, where the problem is definable but learning is required to address it (Yamaguchi et al., 2017). Since the scope of the school plan is vast, and there are numerous priorities, it is important for me first to review the school plan to determine which strategies are technical and can be directly implemented, and which ones are adaptive, and require learning, experimentation, and adaptation.

The distinction between technical and adaptive problems is crucial because it is common in the current SIP process for technical solutions, like evidence-based programs and research-based practices, to be used to address adaptive challenges, like behavior or learning difficulties. Donohoo and Katz (2020) contend that in education, "not all change efforts are designed in ways that lead to quality implementation because they fail to account for the complex contextual factors that are unique in each school environment" (p. 7). Similarly, Yamaguchi et al. (2017) conclude that implementation gaps occur when

fidelity to best-practice programs are promoted instead of the collaborative, continuous process of adapting them in response to changing classroom realities.

Developing teacher capacity for taking risks in their professional practice requires a safe space for them to experiment and collaborate with others. A positive, authentic approach provides the foundation for engaging teachers to help cope with their more challenging work requirements by encouraging them to begin from their strengths. Adaptive leaders mobilize people to engage in challenging work, which creates stress and discomfort because it challenges their beliefs and requires them to change their practices (Heifetz, 1994). Edmondson (2013) asserts that psychological safety is essential for people to take risks and innovate. She adds that knowledge will not emerge if people do not have safe spaces to share their ideas and concerns with others without fear of repercussion. A unique feature of adaptive leadership is Heifetz's (1994) conception of a holding environment: a safe space the leader establishes to enable a productive level of distress that promotes consideration of others' ideas, concerns, and ultimately leads to new learning (Heifetz & Linsky, 2017). In school improvement work, this means I must create an environment where teachers have opportunities to work together in a culture where they can share their ideas, ask questions, and feel safe expressing how they are feeling.

Agile leadership: Shared leadership and continuous learning. For teachers to participate more fully in the nature of school improvement initiatives where priorities are mandated and District-wide, a culture shift is necessary to empower teachers to be learning leaders within teacher groups. Agile leadership engages teachers in shared leadership and developmental work that continually adds value to students (Project

Management Institute (PMI), 2017). Breakspear (2017), describes agile leadership as being "responsive, quick to spot emerging problems or opportunities and work in short-iterative cycles of adaptation, learning, and improvement" (p. 69).

Agile leadership is a recent phenomenon in education. Mergel and Ganapati (2020) assert that government organizations are still learning how to apply it within the bureaucratic policies and practices that have traditionally focused on long term plans that are slow to implement. In contrast, agile organizations engage in light and fast planning that prioritizes rapid learning, high levels of collaboration, and responsiveness (Mergel & Ganapati, 2020). Like adaptive leadership, agile leadership focuses on adaptive challenges where learning, through interactions and experimentation, is necessary. However, its' unique contribution is the focus on continually creating value for customers and the emphasis on frequent reflective processes (PMI, 2017).

Although this new approach in education is from the software development industry, it is known in Alberta through Dr. Breakspear's partnership with the ATA over the past five years. Since I have been very involved with the ATA in this area and have introduced my teachers to this approach, School X teachers are familiar with some of Breakspear's agile school improvement methods. However, teachers still require my direction for leading their learning in this process. My continued goal is to increase their capacity to lead school improvement. As Klopper and Pendergast (2017) point out, the risk is that principals are likely to perpetuate a culture of compliance and structural solutions instead of focusing on the underlying processes of student experiences, which have remained largely untouched. However, the comprehensive approach to leading teachers, using authentic, adaptive, and agile leadership practices, ensures teachers and students are put first. It enables teachers to face uncertain circumstances, thrive as leaders of innovation, and create continuous value for students.

Framework for Leading the Change Process

The framework for leading the change in School X includes two change models. These change models are compared and considered with other change models. The change theory analysis leads to the conceptualization of the Dynamic Innovation Generative (DIG) change process (Figure 1). In the outer part of the diagram are the three change phases of the Triple Diamond Innovation change model (DEECD, as cited in Bryk et al., 2011). Referred to as the inner circle, *Accelerate* (Kotter, 2014) has seven microchange phases, accelerators, and the Big Opportunity that is illustrated in the middle. An explanation is also provided for using the DIG process to engage teachers in implementing the strategies identified in the annual SIP within a changing school context.

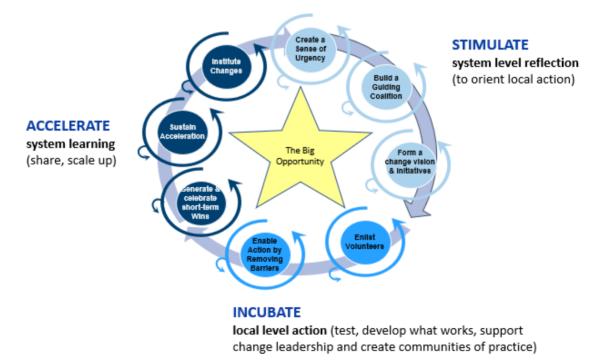


Figure 1. Dynamic Innovative Generative change framework (Leslie, 2020). Adapted from Triple Diamond Innovation (DEECD, as cited in Bryk et al., 2011) and *Accelerate* (Kotter, 2014).

In the outer circle of the diagram, the Triple Diamond Innovation model includes three change phases: Stimulate, Incubate, and Accelerate. It is conceptualized as a dynamic, evolving process that creates linkages between the macro-levels of the education system and the micro-levels of schools (Bryk et al., 2011). The Stimulate phase orients local action by first reflecting on system-level goals and external exemplars of what is working (Bryk et al., 2011). Like adaptive leadership, this phase provides a balcony view of the big picture to ensure local actions are strategically focused (Heifetz et al., 2009; Heifetz & Linsky, 2017). In the second phase, Incubate, local action occurs with ideas tested, and ones that work expanded upon (Bryk et al., 2011). The Accelerate phase is where sharing occurs, celebrating the learning and scaling up promising practices at the local and system-level (Bryk et al., 2011).

The Triple Diamond Innovation model provides a simple three-phase change process that is easy to communicate. It is like other three-phase models like Lewin's (1951) Unfreeze-Change-Refreeze and Breakspear's (2017) Agile Improvement Cycle: Clarify-Incubate-Amplify, which principals in Alberta have become familiar with through the ATA's work on agile schools. However, the terms used to describe the three phases: Stimulate-Incubate-Accelerate, communicate innovative, energetic action that is necessary to address the long history of top-down change management practices that has contributed to complacency. For example, Clarify means "to make understandable; to free of confusion" (Merriam-Webster, 2020). With most school improvement efforts focused on adaptive work, it may not be possible to clarify what exactly needs to happen. Unlike routine problem-solving, adaptive work requires figuring out or inventing what works (Heifetz et al., 2009). However, Stimulate means "to excite to activity or growth"

(Merriam-Webster, 2020). It provides a positive, energetic orientation for catalyzing change efforts. Even though this distinction may seem trivial, it emphasizes the importance of the symbols and shared language in organizations, which mediate the meaning of work and shape the group's culture (Bolman & Deal, 2008). Despite the strengths of the Triple Diamond Model, it lacks detailed strategies for enacting each of the phases.

The *Accelerate* change model provides the necessary detail to strategically lead the change process. *Accelerate* includes eight change phases or accelerators: 1) create a sense of urgency; 2) build a guiding coalition; 3) form a change vision and initiatives; 4) enlist volunteers; 5) enable action by reducing barriers; 6) generate and celebrate short-term wins; 7) sustain acceleration, and 8) institute change (Kotter, 2014). Unlike Kotter's earlier eight-step prescriptive, linear step by step methods (Northouse, 2016), *Accelerate* is an updated model with the steps redesigned as system accelerators, operating as micro-processes, generating energy to propel change forward in the organization (Kotter, 2014).

Accelerate introduces the Big Opportunity that translates the organizational vision and strategic priorities into a short, clear, positive, rational, compelling, aligned, and authentic statement that addresses complacency by capitalizing on a window of opportunity (Kotter, 2014).

The third feature in *Accelerate* is the concept of a *dual operating system*, the hierarchical and network sides of the organization. The accelerators operate on the network side, responding to fast-paced change and seizing opportunities that arise, and the hierarchical side maintains efficiencies by providing structures around what works

(Kotter, 2014). With both sides working together, dynamic, self-regulating linkages form that enable strategic agility and organizational growth.

Cooperrider and Whitney's (2005) Appreciative Inquiry cycle was also considered as a change framework. Like *Accelerate*, it provides a more detailed change process and literature to support four phases: discovery, dream, design, and destiny (Cooperrider & Whitney, 2005). Appreciative Inquiry has a positive orientation that helps to address complacency through "the cooperative, co-evolutionary search for the best in people, their organization, and the world around them" (Cooperrider & Whitney, 2005, p. 7). It also aligns well with a Positive Authentic Leadership approach by positively orienting change efforts (Luthans and Avolio, 2003). Busch (2011) asserts a positive stance empowers people from an appreciative, strength-based approach to reduce resistance and increase participation.

Although a positive approach conveys hope and enables action, there are times in school improvement work when gaps need to be addressed, such as deficits in teaching practices and student results. Also, Heifetz (1994) argues that for people to change, they need a productive level of distress for them to adapt and thrive in new circumstances. Furthermore, teachers may feel silenced or not able to convey concerns if the focus is on the positive aspects of change. Like Appreciative Inquiry, *Accelerate* has an appreciative emphasis through the Big Opportunity, but it also allows for traditional problem-solving, through hierarchical routines and structures, to occur.

Approach to leading change in School X. *Stimulate.* This phase orients the change toward SIP priorities, defined by the School District, and generates a sense of excitement through the Big Opportunity. It includes Kotter's (2014) first three

accelerators: creating urgency, build a Guiding Coalition, and form a change vision and initiatives. The first Guiding Coalition is formed as teachers take on a leadership role in the school by leading a change in one of the SIP areas. Wenner and Campbell (2017) define teacher leaders as teachers who maintain K-12 classroom-based teaching responsibilities while taking on leadership responsibilities outside of the classroom. This definition is an important distinction because school improvement plan strategies include both classroom and school-based initiatives. Providing teachers increased opportunities for school leadership gives them a greater voice and choice in school improvement. Shared leadership supports an authentic leadership approach that recognizes people's strengths and builds capacity by finding what fits with their talents (Luthans & Avolio, 2003). This way, teachers relate to what matters to them most, and teams come together to work on making it happen. When teachers are connected to peers with a common purpose, it contributes to their professional growth, empowering them (Wenner & Campbell, 2017), and motivating them (Hargreaves & Fullan, 2012) to actively participate in the change process.

Incubate. This phase involves inviting other teachers to participate as leaders of school improvement. Incubate includes Kotter (2014) accelerators: enlist volunteers and enable action by removing barriers. Fullan and Hargreaves (2015) assert that the main feature of successful schools is a collaborative culture that builds internal accountability, "combined individual responsibility, collective expectations, and corrective action" (p. 4). This internal accountability, they state, provides the coherence that leads to successful schools and improved student achievement, not only on test scores but also through deeper, meaningful learning. During this phase, enabling action involves removing

barriers by limiting the number of initiatives teachers are participating in, and providing the necessary support to assist them. Reducing barriers may include providing support, PD, and resources; however, it also means mitigating potential overload by, for example, limiting the number of (NIC) teams that teacher would be on. When teachers become more confident in collaborating in teacher teams, additional pressure and responsibility may be necessary to promote deeper professional inquiry. In that case, a holding environment (Heifetz, 1994; Heifetz et al., 2009; Heifetz & Linsky, 2017) would be established to open a productive level of tension to promote new learning.

Accelerate. In this phase, teachers share their evidence of learning and growth. The accelerators in this change phase involve: generating and celebrating small wins, sustaining momentum and accelerating, and institute changes (Kotter, 2014). It includes sharing failures, celebrating successes, and scaling, if relevant, to gaining momentum in the change plan. Frequent feedback loops enable an agile mindset and emphasize the principles of transparency, adapting to change, lean thinking, delivering value, respecting people, and continually improving (PMI, 2017). Celebrating small wins can build credibility, increase participation, and sustain momentum (Kouzes & Pozner, 2011). Reflection, after each cycle of the DIG change process, draws out successes and failures, informs decisions about the next steps of action.

The concept of a dual operating system is critical during the Accelerate phase. As Hagel III, Brown and Davidson (2010) contend, organizational success is dependent on the "ability to amplify the efforts of individuals so that small moves, smartly made, can become catalysts for broad impact" (p. 6). Remembering that the accelerators power the teacher networks through shared leadership, the cycles of learning provide new information to the hierarchical side that, if sustainable, becomes institutionalized. An example of evidence of institutionalized change would be seeing teachers who were not involved initially in the team using similar strategies in their practices.

Critical Organizational Analysis

In this critical organizational analysis, the problem of engaging teachers in an ongoing process of implementing and monitoring our School District school plans is further examined. Bryk et al. (2015) assert, "Quality improvement is getting more of the outcomes one wants that requires attention to how these various processes are currently conducted, to identifying opportunities for carrying them out better, and to testing these changes over time against data" (p. 46). The needs arising from the gap analysis are identified and used to determine the possible solutions to address the problem.

Gap analysis. Nadler and Tushman's (1989) congruence model provides a mechanism for analyzing the current organizational state, and to identify areas of improvement within the current school improvement process. As identified in Figure 2, many organizational components were analyzed, and the organizational readiness for change findings and the associated research used to determine where changes were needed and how they might be addressed.

Input (current state). Several external factors influence the current practices and readiness of teachers to engage in implementing school plan strategies, including policy changes and significant budget cuts. Over the past five years, the ATA has advocated for increased teacher autonomy for professional learning and provided funding and learning opportunities through the Agile Schools Network (ATA, 2017). Leaders and teachers have been encouraged to use agile methods to support rapid, iterative school

improvement to address the changing school, teacher, and student needs. In their recently mandated leadership standards training and certification, Alberta Education has promoted to school leaders' agile approaches for engaging teachers in collaborative, evidenceinformed professional learning for school and practice improvement.

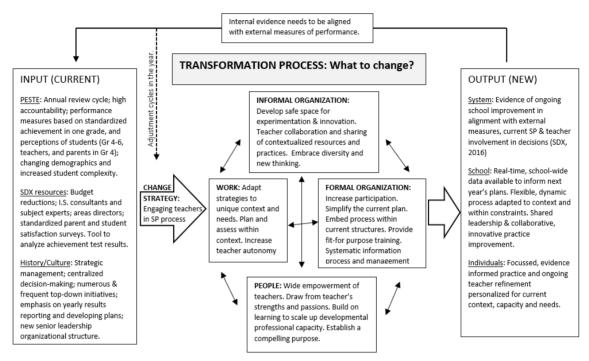


Figure 2. Adapted from Nadler and Tushman's (1989) Congruence Model, illustrating the external factors influencing the current school plan process and what needs to change to move the change strategy forward, to reach the desired outcomes.

There are currently School District resources to support school improvement, but this may not be sustained. The Instructional Services department provides supports through subject area consultants and monthly principal training sessions on school board priorities. Annual parent and student satisfaction surveys are developed in-house; however, there is no year to year comparisons made. A data analysis tool is available for analyzing the achievement test results. There are no other tools or information management systems to gather and analyze real-time results at the school level. Principals are given one full day away from the school to input school plan results and develop

plans. They are expected to involve staff in decision-making (School District, 2016). Time for engaging teachers in the process during the year is limited to four PD days and after school staff meetings. There are no current structures, processes or guidelines available for principals to support the implementation of school plans; however, in an older version of the SIP template, there was a diagram of an older model of the Teacher Sprints flowchart, like a PDSA model but with the inclusion of a 4 week review cycle included. It was never enforced nor widely used for SIP implementation. It has since been removed. Despite no formal processes in the School District for implementing SIP, the expectation remains that the SIP should be a lived process and reviewed throughout the school year (School District, 2016). As a principal, I have extensive experience in using Teaching Sprints as I piloted the model at a previous school. When possible in School X, I have incorporated the Agile philosophy in PD sessions that Teaching Sprints promotes, including taking small steps forward and adjusting actions based on real-time data enabled through frequent feedback loops (Breakspear, 2020).

The school plan process is informed by the principles of strategic management, where traditional, up-front planning established the strategies to be executed during the school year. As previously stated, the School District is hierarchically structured and enacts centralized decision-making, often promoting top-down initiatives and bestpractice programs and pedagogies. There is a strong emphasis on annual results reporting of quantitative data. This past year, principals had to report examples of qualitative data in the various sections of the 30-page template. Furthermore, the organizational readiness for change is moving toward openness for innovation and local decision making. This shift to local school autonomy is occurring because of the changes enacted by the School

District's new Chief Superintendent and organizational restructuring. Further changes to the organizational structure and potential changes forthcoming may impact the direction of school planning and resources to support implementation efforts.

Internal transformation process. The formal and internal school processes are analyzed and discussed to assess gaps in how school improvement work occurs.

Work. In the past, top-down initiatives and solutions have been prescribed to schools, with the expectation that principals implement them with teachers. The increasing number of mandated initiatives and broadly defined strategies have contributed to ad hoc approaches, limited implementation, and lack of ongoing monitoring of school plans. Alberta Education's (2015) workload study reported that 80% of the teachers and principals attributed increasing workload and stress to the growing job expectations and rising number of students with high needs.

In *Learning to Improve*, Bryk et al. (2015) assert "developing standard work processes is key to reducing the stress and cognitive overload associated with carrying out complex tasks" (p. 48). Given the length and breadth of objectives, school plans will need to be simplified and contextualized to the current reality in the school before work processes can be put in place. Hence the gap identified will be the need for teachers to have the agency to adjust the current school plan strategies to adapt them for the unique school and classroom circumstances.

Informal organization. Current rewards for change are based on standardized achievement and perception data. There has also been a strong emphasis on best-practice solutions being used to address the gaps. Principals and teachers in the province have reported significant decreases in their autonomy within their practice, and significant

increases to student complexity (ATA, 2015). The need for innovative practices can emerge from "a mix of committing to best practice (existing practices that already have a good degree of widely agreed effectiveness) and having the freedom, space, and resources to create next practice (innovative approaches that often begin with teachers themselves" (Hargreaves & Fullan, 2012, pp. 50-51). Innovative solutions, evolving over time through incremental and iterative development, are proving to be highly effective in many organizations (Denning, 2013). Edmondson (2013) argues innovation does not happen in isolation, but requires people motivated to make a difference by working together on an ambitious goal and shared vision for the future that stretches beliefs of what is possible beyond what people believe they are individually capable of. She also recognizes some of the challenges and explains that people must "span boundaries, build psychological safety, and cool conflict to make teaming work and allow innovation to flourish" (Edmondson, 2019, p. 47). Given the emphasis on top-down solutions and conflicting messages in policy of what is valued, teachers will need increased autonomy and agency to experiment within their current practices, individually and collectively.

People. Teacher readiness to change and belief that they will have the energy and resources to move forward in a new change plan is low. Yearly staff changes have led to varied experiences and processes. The school plan process is often perceived as a yearly event. My conversations with several colleagues and teachers have informed my understanding that once developed, school plans are rarely considered to be valuable guides for school improvement and are seldom referred throughout the year. Research supports that school plans are perceived as external accountability tools rather than meaningful school change documents (Strunk et al., 2016; Mintrop & MacLellan, 2002).

Hence, the research challenges the purpose and value of school plans as meaningful tools for improving schools. Perpetuating a top-down agenda without consideration of teacher and contextual needs contributes to cultures of dependency on school leaders, individualistic and simplistic solutions to complex problems, and the increased level of disheartenment of teachers who are prescribed ways to improve their practice (Hargreaves & Fullan, 2012).

A compelling purpose that appeals to peoples' hearts and the head is necessary to address complacency (Kotter, 2012). To address this gap, teachers would need to believe that their engagement in the school plan process is worth the effort. In *Teaming to Innovate*, Edmondson (2013) maintains a compelling purpose fuels people's energy to take risks and persevere in "hard and interpersonally challenging work" (pp. 33-34). A stronger connection between the school plan strategies and the daily work of teachers is needed, along with a compelling purpose to address complacency. Teachers need to be empowered, drawing on their strengths and passions, working collaboratively to develop interventions and innovations for what works in their context.

Formal organization. Teacher openness to change is influenced by organizational and cultural factors like power relations, hierarchies, participation, communication, and measurements (Cawsey et al., 2016). As a large organization, scanning the environment and seeking stakeholder input and perspectives is a complex process. In the School District, formal processes for communication and engagement are consistent with Lewis' (2019) findings, where restrictive participation through invitation and advisory groups are most common. Mintrop and MacLellan (2002) argue teachers often comply with school plan implementation demands, despite the loss of autonomy and superficial understandings of the plan. Opportunities for informal communication from principals and teachers is fostered within the School District. However, there are no formal processes for the wide empowerment of people who may have diverse or contradictory opinions.

Active participation is essential to develop a shared understanding and engagement in an ongoing school plan process. Katz et al. (2018) emphasize critical feedback is necessary to shift collaboration from the common traps of "superficial niceness" (p. 131) and "activity" (p. 132) to push thinking beyond individual perspectives and to gain alternative views to challenge confirmation bias. An openness for agile approaches "requires consensual decision-making, and acceptance of trial-and-error needs" (Mergel & Ganapati, 2020, p. 4). Since teachers have had limited exposure to professional collaboration, adaptive leaders would recognize the risks of wide-empowerment and potential conflicts so that they would employ protocols for respectful, critical conversations, and collaborative feedback.

Structures and processes to measure progress and inform decisions in the school plan process are lacking. Attendance and demographic data are the only data that can be easily sourced from existing student information management systems. Real-time data related to students are isolated to teacher grade books. Other than yearly professional growth plans, based on teacher standards and not necessarily on school plan outcomes, there is limited evidence of teacher practice improvement and school improvement.

Given the school plan's vast scope and numerous outcomes, a systematic way to collect and use available data is needed to focus implementation efforts, guide decisions, and determine progress. James-Ward, Fisher, Frey, and Lapp (2013) contend it is not

necessary to have large amounts of data for school and instruction improvement, suggesting effective schools use the data they have available to continue improving. In addition to short-term formative assessment, however, Earl and Timperley (2015) assert education evaluation requires evaluative thinking and long-term summative assessments to provide "evidence to chronical, map, and monitor the progress, successes, failures and roadblocks in innovation as it unfolds" (p. 5). Data-informed decisions are necessary at the various stages of the school plan process. The current process for making strategic decisions emphasizes the government's standardized assessments, as reported in the Annual Education Results Report. To decide on relevant school-based improvement, there is a need for a strategic approach to using, collecting, and storing data to support teachers in making evidence-informed school and instruction improvement decisions.

Output (future state). In the envisioned future state, there are several desired and predicted outputs that would arise if the organizational gaps and readiness concerns were addressed. At the system level, there would be ongoing evidence of school improvement, adhering to the Alberta Education (2019) and the School District (2016) policy and procedure accountability and stakeholder participation expectations. There would be stronger alignment between the implementation of the school plan and monitoring of progress, in relation to internal and external measures, encompassing a variety of data types including qualitative evidence. At the school level, real-time data would be available to inform the internal process and yearly plans. To challenge the status quo, principals would promote innovative practices by fostering opportunities for teachers to engage in adaptive challenges that encourage diversity and productive levels of conflict. Teachers would be highly engaged as co-creators and collaborative leaders in developing

the strategy over time through flexible structures and processes, adapting for their unique circumstances and responsive changing student needs.

Changes needed. Several gaps were identified in the Critical Organizational Analysis. First, a clear direction and guidelines are needed to provide intentional focus and attention to strategy implementation and development within the dynamic school setting. Fullan and Quinn (2016) assert developing coherence between external requirements and internal realities is the "glue that will increase the coherence of the district and school efforts at every level and build a clear path to improve learning in demonstrable ways" (p. 17). The misalignment between our current school plan process and measures related to external accountabilities would help to provide some clarity for what the end purpose is, in relation to our school improvement work and yearly accountability. In addition, the complexity of the plan and broad-based focus requires synthesis so the vision can be effectively communicated and used as a guide for our internal efforts.

Second, teachers need autonomy to make decisions, individually and collectively within their current capacity and contexts. The principal will need to ensure they do not try to manage the strategy process by mandating best-practice programs and solutions, given the unpredictability and complexity of school, teacher, and student needs. Donahoo and Katz (2020) depict collective efficacy as what drives teachers' behaviors that are essential for quality implementation, including engagement in "professional learning structures that reflect a progressive inquiry methodology that results in focused effort, persistence, application, experimentation, and analysis in search of a better way of doing things in schools and classrooms" (p. 28). Teacher collaboration provides the opportunity

for them to develop their individual and collective capacity, and to develop group efficacy to strengthen their agency for change.

Third, a way to capture evidence of progress at the school level is necessary. An information management system is needed that is compatible with various types and forms of evidence. To build momentum, continued openness and readiness for change, individual and collective feedback on strategy implementation learning and progress related to student improvement would need to be collected and stored in a way that supports future decisions. To focus efforts on learning and value-added, impactful progress, Breakspear (2017) promotes agile implementation using evidence to inform school and practice improvements. With the current lack of data that relies almost solely on standardized achievement or anecdotal recall of activities, a process for continuous assessment of school improvement strategies and frequent feedback would help to inform decisions and propel consideration of new strategies. These three areas of what needs to be changed in our current school plan process provide the foundation for the following proposed solutions.

Possible Solutions to Address the Problem of Practice

In this section, the proposed solutions are discussed for their strengths and limitations, which leads to a recommendation for addressing the gaps in School X's SIP process. The gaps identified in the critical organizational analysis provide direction for developing the solutions. The changes needed in the SIP process are a clear direction to communicate and align implementation efforts, professional teacher autonomy, and a process to build teacher capacity for contextualizing and adapting strategies. Finally, a system to collect and organize SIP data to inform decisions in a timely manner is needed. For quality SIP implementation, various forms of data are necessary to address the limitations of current school-based data and to facilitate responsive decisions in the changing school context.

Solution 1: Strategy Map. A strategy map is a one-page, visual representation of the organization's change vision and strategies, that links strategic plan goals with internal structures and processes (Cawsey et al., 2016). Kaplan and Norton's (2000) developed the concept of a strategy map to assist organizations struggling to implement their planned strategies. They assert "the key to executing your strategy is to have people in your organization understand it—including the crucial but perplexing processes by which intangible assets will be converted into tangible outcomes" (p. 167). Kaplan and Norton (2000) assert that strategy maps support strategic plan implementation in many industries, including education.

A strategy map provides a synthesis of the lengthy SIP document and assists in communicating complex processes with teachers. Fullan and Quinn (2016) identify providing direction by creating clear goals and strategies for moving forward as a change driver that fosters a shared purpose and successful action. Clear direction clarifies teacher expectations and focuses on school improvement. It also reduces misunderstandings and potential friction between leaders and teachers (Schmoker, 2016). Drawing on Armitage and Scholey's (2007) generic strategy map, a template for School X's Strategy Map (see Appendix C) provides an overview of the key processes in the SIP process. As indicated in grey in Appendix C, the School X Strategy Map also includes elements of Kaplan and Norton's (2000) balanced scorecard strategy map to highlight data sources for making

decisions, monitoring, and evaluating the SIP. The strategy map considers the four main perspectives to plan the connections between people, processes, and information.

The strategy map development begins from the top, with consideration of the School District priorities and goals for students, then is built from the bottom with teacher perspectives and the internal processes to support them. From the top of the map, since School X receives funding from Alberta Education and the School District, the financial perspective refers to education outcomes and district priorities. The AERR and districtsourced data demonstrate stakeholder value. In addition to external assessments, local data could be used to determine the extent to which a change strategy has an impact. Next, the student goals are established based on the information available. After that, the focus shifts to teacher learning and growth perspectives, and then the internal processes and structures necessary to support teachers in meeting the identified student goals.

A strategy map has several strengths. It would address the misalignment between the external and internal factors influencing the SIP process. It also communicates the government and organization's vision and provides teachers with a "clear line of sight into how their jobs are linked to the overall objectives of the organization, enabling them to work in a coordinated, collaborative fashion toward the company's desired goals" (Kaplan & Norton, 2000, p. 168). As previously stated, strategy maps are a form of backward planning. In a study on the impact of the direction of planning and goal pursuit, Park, Lu, and Hedgcock (2017) conclude backward planning "not only led to greater motivation, higher goal expectancy, and less time pressure but also resulted in better goalrelevant performance...especially when goals were complex to plan" (p. 1620). Synthesizing the current school plan into a concise document would improve teacher

understanding of the SIP priorities and their essential role in creating stakeholder value, which from an educational perspective ultimately means student success.

The main limitations in using a strategy map include the lack of detail of the underlying processes and data management to inform decisions. It does not address the issue of limited school-based data to inform ongoing decisions. There is no indication of how information is collected or organized, so additional time and resources are necessary to collect the information to support the implementation of SIPs. The administration would need at least one day of uninterrupted time to collate the external data and align it to the SIP priorities. In an agile implementation, Morrison, Hutcheson, Nilsen, Fadden, and Franklin (2019) stress the importance of strategic agility and momentum by starting small, to go fast. Given the number of strategies, complex processes, and limited emphasis on evidence-informed practices, the strategy map would need to be augmented by additional strategies to support the continuous implementation of the SIP.

Solution 2: Collaborative short-term action planning protocol. The

Collaborative Short-Term Action Planning (CSTAP) protocol is based on Morrison et al. (2019) *Strategic Doing* questions that promote agile learning conversations and continuous learning. When executing strategic plans, Morrison et al. (2019) argue strategy is about addressing the question of where we are going and how we are going to get there? However, they warn this is not enough to put a strategy into action. Therefore, Morrison et al. (2019) developed *Strategic Doing* to catalyze strategic action through shared leadership and the development of draft short-term action plans that facilitate deep learning, quick decisions, commitment to action, and frequent feedback loops. *Strategic Doing* asks four questions: "What could we do? What should we do? What will we do?

What is our 30/30?" (Morrison et al., 2019, p. 155). The 30/30 question is the teams' commitment for when they will meet to share their learnings and to set the direction for the agreed-upon number of days (i.e., 30 days). Since most school improvement work involves addressing technical/adaptive challenges, that have a definable problem but require learning to make progress (Yamaguchi et al., 2017), *Strategic Doing* enables the adaptation of strategic plan strategies for local contexts. VanGronigen and Meyers' (2018) conclude in their study of the quality in a sample of 410 short-cycle SIPs that implementing the plan through short-term cycles energizes schools to invest in targeted priorities, leverage resources, and build a foundation for sustainable change.

The CSTAP protocol introduces short-cycle planning into the SIP process (see Appendix D), which provides a collaborative communication protocol, that is designed simply to quickly focus teacher conversations, develop shared leadership, and guide SIP implementation decisions. Katz et al. (2018) demonstrate protocols "provide a systematic approach to professional dialogue that supports teachers/leaders to reflect on their practice [and] promote effective and efficient communication and problem-solving" (p. 81). The CSTAP focuses direction and facilitates quick decisions that are studentcentered, collaborative, and impactful to school improvement. The CSTAP protocol adapts Morrison et al. (2019) draft, short-term action plans, and includes the Strategic Doing questions and tactics to promote shared leadership and agile, collaborative school improvement. Donohoo and Katz (2020) emphasize quality implementation requires "recursive cycles of progressive inquiry in which educators try something, use feedback to revise their approaches, try again, and so on, in order to realize the promise of evidence-based practices in specific contexts" (p. 13). The CSTAP protocol aids teachers

in decision-making by asking teachers to brainstorm and rate their ideas using a $2x^2$ decision-making strategy. The simple $2x^2$ decision-making grid reduces the time in debating every proposed idea and quickly establishes the Big Easy: the strategy that is the easiest to implement and most impactful in meeting the needs of students.

There are several strengths to the CSTAP protocol. The CSTAP affords teachers the autonomy to engage in shared leadership for learning that addresses their current contexts and fosters collaborative practices focused on student learning. Teachers are generally isolated in their practices, with no formal structures, processes, or embedded time for collaboration. Moving from a siloed culture to collaborative practices is necessary to engage teachers in meaningful and relevant school improvement (Hargreaves & Fullan, 2012). Furthermore, School X teachers are accustomed to a top-down approach to professional learning and typically rely on the principal or external expert to lead them in their learning. This is exacerbated by the promotion of fidelity to best-practice and program implementation. Quality implementation requires teachers to adapt the best-practice programs and practices to their unique change contexts (Donohoo & Katz, 2020). The CSTAP protocol addresses the limited time available to teachers to engage in collaborative conversations, providing a flexible and responsive approach to enabling SIP implementation and adaptation to local contexts.

The CSTAP protocol engages teachers in agile learning conversations that foster a learning community. Alberta Education's (2017) vision for quality professional practice is evidence-informed, contextualized, and optimizes teaching and learning. Edmondson (2013) notes that leaders who move from hierarchical approaches to flexible, dynamic teams that optimize peoples' knowledge, talents, and strengths achieve fast-paced change

towards organizational goals. By engaging in learning conversations, teachers are building their capacity for professional collaboration. Professional collaboration builds teachers' collective knowledge and expertise, "where practices and their impact are transparently tested, developed, circulated, and adapted" (Hargreaves & Fullan, 2012, p. 50). As teachers engage in agile learning conversations and continuous cycles of improvement, they develop a deeper understanding of the SIP priority areas that are defined by Alberta Education and the School District. This understanding creates stronger coherence in the systems, enabling a connection between the broader goals and their collaborative efforts and student outcomes.

Limitations to the CSTAP protocol solution includes the presumption that someone on the teacher team will have the instructional capacity for contributing innovative ideas during the development of the short-term plan. Given the low level of readiness of teachers to engage in innovative practices, the celebration of failures in addition to successes is essential to promote creative thinking and risk-taking in implementing new ideas (Edmondson, 2012).

Another limiting factor is the risk that teachers' will not follow through on their commitments for implementing their 30/30 goal. One of the reasons *Strategic Doing* is successful in moving the identified strategies forward is that when team members follow through with their commitment to the team, it builds trust and relationships within the team (Morrison et al., 2019). If teachers do not meet their commitments, it may impact their relationships with others. Alternatively, teachers may engage in strategy implementation at a superficial level. Lewis (2019) cautions leaders to be aware of subtle

forms of resistance, so it will be important to interact with team members to assess the progress made and to determine if intervention necessary.

The resources needed for the CSTAP includes time for teachers to learn the approach to engage in collaborative work. Asserting the potential of value creation during informal conversations, Chia and Holt (2009) maintain that four face to face meetings provide the optimal number of opportunities for team members to develop collegial and effective relationships. To provide teachers with the necessary time, contractual obligations related to assignable time, resources to provide teacher relief, and any PD costs need to be considered. Furthermore, Hall, Childs-Bown, Cunningham-Morris, Pajardo, and Simeral (2016) assert principals should recognize and utilize the protocols to drive PLCs because of their high impact on building team member capacity and focus on student learning; however, they recommend teachers choose which protocol they wish to use. Therefore, it may be necessary to present the CSTAP protocol as a temporary strategy to foster agile, collaborative short-term action plans and adjust it as necessary to address teacher challenges with it.

Solution 3: Digital school portfolio. A digital school portfolio could be created with technology such as Google Drive or OneDrive, serving as a basic information management system, where teachers would be asked to upload some combination of evidence, exemplars related to their strategy implementation efforts, professional learning reflections, and student work. In agile schools, "meaningful learning is the primary measure of progress" (Peha, 2011). Fisch (2010) advocates using digital school portfolios as alternatives to strategic plans that emphasize external performance measures instead of local, contextualized evidence of school improvement. After successfully attaining school certification using a school portfolio as a pilot program, Fisch (2010) contends the school portfolio develops a shared vision and tells a story about school improvement and informs school improvement decisions using various forms of data.

Communicating through stories has a powerful impact on how the brain functions and is more likely to grab another person's attention, increase their buy-in, and strengthen their emotional connection (Vora, 2019). Expanding the type of data shared and gathered in the SIP process would provide teachers with an alternative way to share a variety of evidence, such as student videos, pictures of the project, thank you cards from the community, as evidence of progress toward school goals.

There are several strengths to implementing a digital school portfolio. The first is the simple design, using existing technology that is flexible and familiar. It also shifts the current process from a top-down approach to a bottom-up process. Bernhardt (2018) contends that for schools to move beyond a culture of compliance to one that is committed to staff engagement in data-informed continuous improvement, multiple measures of data and intentional structures for collaboration are needed. The idea of a digital school portfolio is to pull teachers toward the school plan outcomes and engage them in sharing and collaborating with each other to build momentum. "Pull platforms are initially deployed to serve a specific need, but, because of the flexible design, these platforms rapidly evolve in unexpected directions and end up serving a broad range of needs" (Hagel III et al., 2010, p. 76). Such platforms provide a format to share and celebrate the great work already happening and contribute new ideas to others. Generating and celebrating short-term wins is critical when implementing change initiatives because it validates people's efforts, provides recognition, helps to fine-tune

the next steps, challenges resisters, and sustains momentum (Kotter, 2012). A digital school portfolio addresses the lack of structures, processes, and information management systems to capture and use real-time data for continuous improvement. Different types of evidence of teacher and student learning would foster evidence-informed decisions.

The limitations associated with the digital school portfolio include the lack of teacher collaboration to foster growth-oriented, practice improvement, and innovative practices. Individual practices can promote professional isolation and limit teachers from gaining valuable feedback to inform their decisions (Hargreaves and Fullan, 2012). Innovative and creative solutions to address current gaps in student learning and teacher practice may be ignored. It would also require principal and teacher capacity for using technology. With the plethora of information in schools, without time to establish guidelines to assist teachers in choosing quality evidence in alignment with the school plan, the digital evidence may not help to inform decisions.

Recommendation: Collaborative, short-term action planning protocol. The strategy map and the digital school portfolio address some of the gaps in the current SIP process. However, the CSTAP protocol is the recommended solution because it addresses most of the needs from the gap analysis, including the need for a clear direction and guidelines, increased teacher autonomy and collaboration norms, and evidence of progress related to school plan outcomes. The CSTAP protocol empowers teachers to be leaders and self-directed in their professional learning. Hargreaves and O'Connor (2018) assert the benefits of teacher collaboration, teamwork, and a sense of community in action. In addition to the long-term impact of fostering a culture of continuous school improvement, professional collaboration results in greater efficiency, better results, moral

consolation, enhanced motivation, commitment to change, worker retention, diversity of perspective, and tenacity in the face of obstacles or disappointments (Hargreaves, 2018, p. 12).

The CSTAP protocol acknowledges the complex nature of dynamic organizational change and strengthens the authentic/adaptive/agile leadership framework and DIG change process by focusing specifically on shared leadership and a self-regulating process where learning emerges through interactions in local contexts. Complexity-based professional learning is a process where teachers are invited to contribute their ideas and form flexible teacher teams, such as Networked Improvement Communities (NICs), that are flexible groupings that focus on purpose-driven change (Bryk et al., 2011) that increase teacher connections, activate learning, and foster continued development (Fong, 2006).

The CSTAP protocols' focus on Strategic Doing is an appreciative approach that aligns with a positive, authentic approach to leading change that builds on teachers' strengths, develops capacity, and enables shared action to optimize learning for all (Luthans & Avolio, 2003). Collaboration protocols provide the necessary structure to intentionally interrupt teachers' default practices and move teachers beyond collegial conversations to joint work that has an impact on addressing adaptive challenges (Katz et al., 2018). In keeping with the Agile Schools Manifesto (Peha, 2011), the protocol is lightly structured and does not contain a lengthy list of questions or instructions. In advocating for light strategy implementation conditions, Chia and Holt (2009) contend:

strategy-making enables us to see how it is that a bottom-up, more indirect or circuitous approach to strategy emphasizes the importance of attending to the small and seemingly peripheral details and concerns of a strategic situation can often prove more efficacious in the long run than dealing directly with the more spectacular focal concerns. (p. 23)

The CSTAP protocol is a powerful opportunity to build teacher capacity for SIP implementation in a clear, autonomous, and impactful approach that allows responsive decisions for the ever-changing school context. It fosters a learning culture of agile school improvement where small successes accumulate to a culture of shared leadership planning, and evidence of sustainable SIP process, creating an agile school through an agile culture of continuous, evidence-informed school improvement.

Scrum: Incremental/iterative change cycle. Scrum is an adaptive/agile project management framework that promotes short-cycle project implementation and an evolving improvement cycle. Scrum "places a structure around the learning process, enabling teams to assess both what [they have] created and, just as important, how they created it" (Sutherland, 2014, p. 9). Since school planning entails managing a large, complex project, it requires a developmental approach that is like adaptive/agile project management. Scrum is particularly helpful in delivering outcomes in uncertain environments where the project requirements and technical skills are difficult to determine at the outset of the project and need to evolve over time (PMI, 2017). This applies to the many adaptive problems that school plans are trying to address where teachers will need to learn new skills and gain knowledge throughout the change process.

Smith (2018) describes the key elements of the Scrum change cycle: (a) the Scrum Flow: Sprint, Sprint Planning, Daily Scrum, Sprint Review and Sprint Retrospective; (b) core roles: Product Owner (Principal), Scrum Master (Diverse Learning Teacher) and

Scrum Team (teacher teams); (c) Scrum Artifacts: Project Backlog (school plan strategies), Sprint Backlog (shared goals and commitments), Sprint Burn-down Chart (work to do), and Increment (work done).

Scrum is further described as part of the change implementation plan and, in Chapter 3 is illustrated (see Figure 4) as an Agile School Improvement Process (ASIP). Specifically, this approach guides the school planning process by frequently monitoring and recording progress toward school plan outcomes, based on student results and teacher and team learning through reflective cycles. Generally described, the Product Owner works with outside stakeholders and the team to determine needs and manage the Backlog of tasks (i.e., school plan strategies) that need to get done. The Scrum Team defines what part of the Backlog they can work on (Increment) and works individually and as part of a team over a short period of time (Sprint) to deliver it. The Scrum Team then reflects on the quality of the product they delivered (Sprint Review), and how they worked as a team (Sprint Retrospective). Throughout the Sprint Flow, the Scrum Master provides leadership and support to the Scrum Team, helping them maintain focus and perform at their best level to accomplish the task (Smith, 2018). As further described in Chapter 3, Scrum is the project management approach that puts the CSTAP into action. It helps the principal to establish critical activities for teachers to develop and implement their CSTAPs, clarifies roles, and generates evidence of progress through iterative cycles.

Leadership Ethics and Organizational Change

Leaders have an ethical responsibility to be aware of how their behaviors and actions may influence others. When a leader promotes their positional power and values without consideration of others, they risk acting unjustly with a negative impact on people

and the organization. Northouse (2016) asserts that leaders need to be highly sensitive to positional power because central to their leadership role in the process of influencing others in accomplishing mutual goals and shaping organizational values. Positional power elevates the values, perspectives, and decisions of the leader above others, which can intentionally or unintentionally negatively impact others (Northouse, 2016). As a school principal, I hold a position of power within the school. When implementing SIP strategies, my decisions and actions must align with the organization and consider teacher and student needs. An ethical framework provides a moral compass for making decisions and interacting in ways that are inclusive of others' perspectives and needs.

An ethical leadership framework integrates various perspectives and values to inform and guide a leader during change implementation. Focus areas may include ethical decision-making (Bowen, Bessett, & Cham, 2006), moral literacy (Tuana, 2014), and multiple paradigms (Shapiro & Stefkovich, 2016). Shapiro and Stefkovich (2016) provide multiple ethic paradigms of justice, critique, care, and professionalism to frame ethical issues. They are not mutually exclusive. When engaging teachers in implementing school improvement strategies, it is essential to pause and consider the needs of the organization and teachers. To remind leaders not to be too quick to react to situations, Heifetz and Linsky (2017) recommend the metaphor of moving between the dance floor and the balcony. Before reacting, leaders retreat to the metaphorical balcony to first consider the personal, social, and system impact of a situational challenge. Ethics provides both a framework for reflecting on leadership practices and a guide for understanding and responding to issues when they arise.

The multiple paradigms help to highlight some of the specific areas that may contribute to ethical issues in this OIP. Hence, ethical considerations when making leadership decisions include the ethic of justice, the ethic of care, the ethic of critique, and the ethic of professionalism. The ethic of justice focuses on the need to uphold provincial education laws and regulations, School District policies and procedures, and the democratic and equality rights of all education stakeholders. The ethic of justice considers leadership practices that are perpetuating the status quo, hierarchical approach. The ethic of care prioritizes students and their well-being over academic achievements as defined by external measures. The development of this OIP is an example of the ethic of critique, to question the status quo and complacency challenges, which raises awareness of justice inequities like student representation in data analysis and teacher voice in contributing to school improvement decisions. Through the ethic of professionalism, Shapiro and Stefkovich (2016) recognize the ethical considerations for educational leaders, including the moral aspects of an educational leader and awareness for their personal and professional codes of conduct. In the ATA's (2008) Code of Professional Conduct, principal and teacher conduct standards establish the professional expectations with association members, students, school authorities, and the broader community. The Alberta Education (2017) Leadership Quality Standards also establish professional standards for ethical and effective school leadership. The ethic of professionalism reminds school leaders that students are the focus of the work, and teachers are essential in optimizing student experiences.

When promoting organizational change, it is essential to be aware of possible blind spots, team dynamics and conflict, and power and invisible structures. The proposed

solution, the CSTAP protocol, stimulates an agile approach to school improvement that asks teachers to be active participants and leaders in the change. Teachers will work in flexible teams, engage in collaborative, short-term planning that will guide their actions, and elicit new learning during the implementation of SIP strategies. However, Heifetz (1994) highlights the pervasive nature of authority in leadership that perpetuates follower dependency on the leader, especially in times of distress. When promoting shared leadership, it is essential for the leader to be aware of "maladaptive relationships" (p. 71) that perpetuate the predominant dependency on hierarchical leadership (Heifetz, 1994).

Blind spots. Blind spots occur when people are not aware of their wrongdoing or are unwilling to accept them. Blind spots are "hidden from rational thought, the human unconscious affects (and in some cases even dictates) conscious reality" (Northouse, 2016, p. 297). Tuana (2014) describes moral blindness "as a way of seeing the world that obscures one to the fact that an action that one would agree is unethical is occurring" (p. 172). In an organizational context, Hallinger and Leithwood (1996) argue that "a cultural context exists, but our 'acculturated lens' blinds us to its effects" (p. 109). Similarly, Wegrich (2019) states that in addition to organizational bias, "bureaucratic politics" (p. 4) can contribute to blind spots. To uncover organizational blind spots, Fink and Stoll (2005) suggest that leaders create scenarios to generate alternative ideas and images, extrapolate current conditions, and ensure prescribed policies and plans are tested for blind-spots or biases. Additionally, Lewis (2019) recommends that leaders pay close attention to subtle signs of resistance, which may be blind spots arising from their actions, causing concerns for others. Recognizing that blind spots have a negative impact on others is an essential step in ensuring correction and enabling positive change.

In agile approaches to strategy implementation, the role of the leader is to help teams achieve their objectives by first focusing on the purpose of their work (Project Management Institute (PMI), 2017). When leaders start with 'why', they clarify a belief that is bigger than themselves, which inspires others to join them (Sinek, 2009). Kegan, Kegan, and Lahey (2009) encourage leaders to write down their change commitments and to regularly reflect and seek feedback to overcome blind spots and to see the "invisible ways we are undermining ourselves" (p. 137). Teachers are likely also to have blind spots throughout the change process. In collaborative innovation, blind spots can arise from "an over-optimistic take on the potential of outcomes" (Wegrich, 2019, p. 7). Agile Scrum embeds in its ongoing, dynamic, self-regulating change cycle opportunities to reflect through regular feedback loops (Smith, 2018). Also, at the end of each Sprint cycle, retrospectives prompt reflective practice (Smith, 2018), which, through collaborative dialogue, provides opportunities for blind spots to surface and be addressed.

Team dynamics and conflict. In this OIP, teachers are asked to work together in dynamic, self-organizing teams. Personal beliefs and values that contradict this way of working may arise. Edmondson (2013) maintains that traditional ways of people working together no longer function within today's complex, volatile world. She describes teaming as a dynamic activity involving coordination and collaboration, "not a bounded, static entity. It is largely determined by the mindset and practices of teamwork, not by the design and structures of effective teams. Teaming is teamwork on the fly" (Edmondson, 2013, Chapter One, section 1, para. 2). Also, teachers will be shifting their focus from the prescriptive incremental implementation of solutions to adaptive work that requires risk-taking and the development of new understandings and skills. Heifetz and Linsky (2017)

describe adaptive leaders as those who mobilize people to work outside of their usual boundaries, learning through new experiences, and by challenging assumptions. These researchers emphasize "adaptive work creates risk, conflict, and instability because addressing the issues underlying adaptive problems may involve upending deep and entrenched norms" (Heifetz & Linsky, 2017, Chapter 1, section 3, para. 2). Consequently, conflicts between team members and the principal may arise. Teachers may also feel that by being asked to think and act in new ways, their current practice and professionalism are being questioned. Teachers need to understand their critical role in school improvement, especially given their low level of change readiness.

To build psychological safety in teaming, Edmondson (2013) suggests that leaders be accessible, acknowledge limits, display fallibility, invite participation, frame failures as learning opportunities, use direct language, and set boundaries. Adaptive leadership strategies can be used by principals and shared with teachers to help them manage conflicts that arise. Heifetz and Linsky (2017) maintain that leaders need to establish a holding environment where the conflict between people can be worked out, controlling the temperature by maintaining a healthy tension and pace for the change, pacing the work, and helping people envision the future state. Another strategy for regulating distress and negative team dynamics is embedded within Kotter's (2014) *Accelerate* change model. In the first stage, a sense of urgency is generated by giving people a choice to engage in the process, building momentum as others see the value and are inspired to join in. Throughout the change process, the principal will be highly visible and available for teachers. Teachers will be supported to address conflicts in productive and professional ways. Leaders mediate, if necessary, and promptly address any issues of unprofessional conduct. Supports and resources will be provided when necessary, and if not available, the change requests will be delayed.

Power and invisible structures. Principals in the School District are positioned in the middle of a centralized organization and a dynamic school environment. He recognizes the necessity for traditional hierarchies and related managerial processes. However, he argues, "what they do not do well is identify the most important hazards or opportunities early enough, formulate innovative strategic initiatives nimbly enough, and (especially) execute those initiatives fast enough" (Kotter, 2014, p. 5). Principals need to be aware of organizational and personal paradigms that "take on a sacred status...[and are seldom questioned,] even when they are sources of dysfunctional personal or organizational behavior" (Kotter, 2014, p. 8). A culture of dependency and apathy among followers can also contribute to the centralization of power (Padilla, Hogan, & Kaiser, 2007).

Adaptive leaders learn to move between observers and participants, watching themselves amidst the action (Heifetz & Linsky, 2017). With a SIP process entrenched in managed approaches to change, there will need to be a keen awareness of the invisible structures and hierarchical power relations that exist. Drawing attention to how this OIP shifts from a top-down managed approach to a bottom-up agile approach will empower teachers with increased autonomy. It is essential to be mindful of these conflicting paradigms and understand the importance of teachers and staying true to what they are saying. In the future envisioned state, leaders are facilitators and co-creators of change.

Chapter Summary

This chapter outlines a change plan for catalyzing teacher engagement and leadership in school improvement. Implementing the proposed leadership and change framework, along with introducing the CSTAP protocol to build teacher development as leaders and collaborative learners in the change process, responds to the complex, middle spaces of school improvement. It addresses the SIPs complex, competing tensions, and the use of authority when making decisions about change implementation. An important distinction is made between technical and adaptive problems because it impacts the leadership approach for leading change that may perpetuate dependencies on leaders or raise teacher resistance (Heifetz, 1994). The leadership framework strengthens the approach to leading a purpose-driven (Gardner & Carlson, 2015) change plan that focuses on the strengths of teachers (Luthans & Avolio, 2003; Kotter, 2014), and continually responds to the rapid rate of change through frequent feedback loops, a lightweight design, and focus on impact (PMI, 2017).

The integrative DIG change framework introduces an agile, incremental, and iterative change process to generate linkages between social processes and organizational structures (McFarland, Diehl, & Rawlings, 2011). The Critical Organizational Analysis identifies the necessary changes in the SIP process. It informs the development of possible solutions, including a recommendation for *Strategic Doing* using Morrison et al.'s, (2019) draft short-term action planning protocol. The Collaborative Short-Term Action Planning (CSTAP) protocol (Appendix D) introduces a short-cycle SIP planning solution. The chapter concludes with ethical considerations for engaging teachers in an agile school improvement process.

Chapter 3: Implementation, Evaluation, and Communication Plan

The previous two chapters in this OIP provide a deeper understanding of the complexity of the problem of engaging teachers in the implementation of SIP strategies within a changing school context. It has become apparent that the concept of strategy in strategic plans is riddled with hidden political and normative assumptions that promote strategic management and execution of linear, predictable best-practice programs or practices regardless of the local school context.

Through a complexity worldview and authentic/adaptive/agile leadership lens, a clear delineation between strategy execution and strategy development proposes a necessary balance between traditional and emerging strategy implementation. The recommendation of teachers using a CSTAP protocol to promote agile learning conversations promotes a collaborative, shared approach to responsive, evidence-informed school improvement that considers the changing school context. This chapter presents a plan for implementing, evaluating, and communicating the proposed changes.

Change Implementation Plan

In the previous chapter, the recommended solution introduced the CSTAP protocol to help teachers develop shared leadership for school improvement. Donahoo and Katz (2020) point out that although evidence-based approaches are essential, they are likely to fail if they do not take into consideration people's beliefs and unique circumstances. Teachers must not view the CSTAP as an accountability tool that needs to be completed as evidence they are engaging in collaborative practices. Instead, the goal is for teachers to use the CSTAP protocol to build their individual and collective capacity for leading self-driven and sustainable school and practice improvement. Donahoo and Katz (2020)

describe quality implementation as a progressive inquiry process, through which the evidence-based promises of improvement-oriented interventions get realized in practice. The CSTAP protocol includes a progressive inquiry approach, supporting teachers in developing their capacity for creating student-centered, collaborative goals, and short cycles of action where continuous learning and improvement could occur.

Leadership decisions for strategy formation (LDSF). Given Heifetz's (1994) warning that change plans often fail because technical solutions are applied to adaptive challenges, leaders need first to diagnose the situation and planned strategy. Therefore, before introducing teachers to the CSTAP protocol, the SIP strategies need to be diagnosed to determine what type of challenge they are trying to address. After that, teachers would engage in using the CSTAP when necessary to guide the adaptive work that requires them to collaborate and learn together as a NIC team. The CSTAP mitigates this with teachers working on adaptive challenges using the protocol to guide them in their learning. The Leadership Decisions for Strategy Formation (LDSF) diagram (Figure 3) assists in making decisions about the type of problem that needs to be addressed and the appropriate leadership approach. The LDSF diagram shows how the principal, as an adaptive leader, would first diagnose the area of improvement and then adapt the way teachers are to be engaged in school improvement based on the necessary level of authority deemed appropriate for the situation. The LDSF diagram also focuses on SIP direction, ensuring heroic leadership is not promoted.

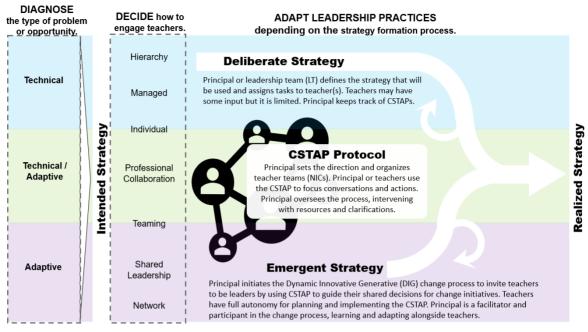


Figure 3. Leadership Decisions for Strategy Formation (Leslie, 2020). Adapted from Of Strategies: Deliberate and Emergent (Mintzberg & Waters, 1985), Adaptive Leadership (Heifetz, 1994), and *Accelerate* (Kotter, 2014).

The LDSF provides a big picture overview and principal perspective of the SIP implementation process. This conceptualization is in line with Cawsey et al. (2016). They assert that visualization provides a better understanding of the change strategy and clarifies the variable aspects, including decisions, actions, alignments, and gaps in logic. The LDSF demonstrates the fundamental concepts a principal would consider when engaging teachers in using the CSTAP protocol, including key concepts like the range of SIP strategies, strategic approaches, and strategy formation processes. Beginning with diagnosing the problem, adaptive leaders determine the strategic approach most likely to move the vision forward, considering the current context in which change is being enacted (Heifetz & Linsky, 2017). Intended SIP strategies are implemented through deliberate and emergent strategy formation processes (Mintzberg & Waters, 1984) that are revisited or continuously evolve throughout the ongoing implementation processes.

Like Heiftez (1994), Mintzberg and Waters (1984) conclude that planned and deliberate strategies often fail because they do not address the many variables that arise within unpredictable, complex environments. As the unknowns become clearer through implementation experiences and learning, emergent strategies can be intentionally weaved into the organizational practices and linked to broader SIP outcome areas. The concepts of deliberate and emergent strategies are essential in this change plan because they bridge the divide between intended and realized strategy while recognizing the different strategy formation processes (Mintzberg & Waters, 1984) that need to be considered to address implementation challenges.

Within the context of the School District SIP implementation, an example of the connection between problems and strategic approaches are presented. For example, the need to increase communication with parents may begin as a technical challenge that is addressed through a managed, hierarchical, and predictive process that could be deliberately planned and implemented. Although this would suffice for many parents, it may not work for others. Due to the complexity of school contexts, communication barriers that would impede the process may include limited access to technology, and language barriers. This seemingly technical problem may evolve into an adaptive challenge that would require additional effort and collaborative approaches to finding alternative solutions to address the shifting nature of the problem.

The CSTAP protocol can be used as teacher teams form to quickly plan and implement deliberate strategies for execution and enact first steps in developing emergent strategies. After the implementation of the strategic initiatives, successes become realized and documented within the SIP process, and challenges provide insights for future initiatives. The CSTAP protocol guides professional conversations about current school needs and develops a shared commitment for change.

As teachers collaborate on their short-term plans, they will work together as a NIC team. As described by Bryk et al. (2011), a NIC is a focused, social arrangement where team members set priorities and targets, sharing expertise and critical conversations, as necessary, to move goals forward. Trust is critical in productive teams because "collaboration involves linking, leveraging, and aligning resources in ways that enhance one another's capacity to create a shared outcome, a mutual benefit" (Morrison et al., 2019, p. 19). The LDSF and CSTAP protocol establish the foundation on which a NIC is developed by focusing direction but maximizing teacher flexibility for engaging in SIP implementation. This connects with Kotter's (2014) idea of developing the network side of the organization that increases peoples' freedom to experiment, innovate and get creative and potentially generate new practices that become sustained in the hierarchical side as routine, traditional practices. The concept of time and space becomes essential in developing a NIC. The CSTAP protocol provides teachers with focused direction, but also establishes a commitment to a timeline, knowing that future iterations may occur and group members in the NIC may change. Drawing on Heifetz's (1994) concept of a *holding environment*, the NIC may be a physical, non-physical, and virtual space. However, this is a safe space where teachers are encouraged to take risks and make sense of how new ideas work within their practice.

Implementation plan priorities. The Change Implementation Plan and Scheduled Priorities (Appendix E), provides a draft of the new routines and structures to support the implementation of the change plan during the school year. The critical stakeholder

activities include the development of a Leadership Team, establishing a Guiding Coalition, and increasing teacher participation and collaboration through the development of a NIC. The DIG change process illustrated and described in Chapter 2 (see Figure 1) provides the focus and direction, along with the energy, to invite teachers to engage in school improvement, and sustains momentum as the change process continuously evolves. The implementation plan and priorities serve as a first draft for how the CSTAP protocol is within the broader leadership approach and change process. However, given the dynamic school context, it will likely need to be adapted as the plan evolves, in consideration of the implementation challenges and emergent learning.

Stakeholder reactions and responses. Within the implementation plan, three embedded tactics will be used to understand stakeholder reactions and to adjust strategies based on the concerns and desires of all stakeholders.

First, frequently discussed, ambitious, specific, and transparent (FAST) goals will be integrated into leadership decisions and practices. Unlike traditional approaches to setting goals that are annually reviewed, privately set, and linked to incentives, Sull and Sull (2018) assert "FAST goals can drive strategy execution but only when they are aligned with strategic priorities, account for critical interdependencies across silos, and enable course corrections as circumstances change" (p. 1). FAST goals help translate "general goals into testable hypotheses [to] surface errors more quickly and precisely, which accelerates the pace of learning and adjustment" (p. 6). Although not explicitly promoted as action items for teachers to develop, the CSTAP protocol incorporates the same assumptions as FAST goals, where teachers are engaged in setting ambitious goals that are specific and openly discussed throughout the implementation process. FAST goals provide teachers with a quick way to plan changes without wasting time in planning detailed goals that are difficult to track and measure. FAST goals are crucial because of the limited time available for teacher PD and collaboration.

The second tactic during implementation will be a focus on evidence-informed decisions and monitoring of stakeholder impact and reactions to change. Due to the current lack of assessment information when strategies are first developed in the SIP, various forms of evidence will be considered when making implementation decisions. Timely evidence will be provided by teachers through formal and informal conversations, dialogue, exemplars, reflections, and surveys. These flexible feedback channels allow stakeholder voices to be heard and understood so that the plan can be adjusted based on their experiences, needs, and perspectives. In motivating and supporting teachers in their professional learning, Appova and Arbaugh (2018) stress that "the depth, meaning, and relevance of the new knowledge together with teachers' ability to transfer and apply new knowledge immediately to their classrooms is critical" (p. 18). With this change plan, teachers will have increased opportunities to share their experiences and new learnings with their colleagues and the Leadership Team. During feedback sessions, the gap between the deliberate plan, driven by the SIP outcome areas, and the emerging strategy, as discovered or developed within current contexts, will be referenced. Evidence of impact helps to align the broader SIP strategies with internal practices, thus reducing the gap between the organizational hierarchy and the work of teacher teams in advancing the SIP strategies within their school network.

The third tactic will be linking the Guiding Coalition efforts in implementing the CSTAP to SIP outcomes. As previously mentioned, the LDSF provides a balcony view of

the SIP process used to gain a clearer picture of what is happening outside of the fray, and to diagnose the situation to determine if a response is necessary and how to intervene (Heifetz & Linsky, 2017). Moving out of the current situation may cloud a leader's perspective; however, taking this watchful overseer perspective provides leaders with clarity in how to align their actions with the strategic vision and how and when to intervene in supporting others in adapting to the challenges they face. Shifting between the balcony view of SIP priorities and the evidence gathered through the CSTAP implementation allows leaders to monitor progress and revise the strategic approach accordingly.

Change champions. The Leadership Team will play an important role in championing the change. The team will act as change initiators who "frame the vision for the change and provide resources and support for the initiative" (Cawsey et al., 2016, p. 25). The Leadership Team will consist of the Principal, Assistant Principal, the Teacher Coach, and a teacher representative. To reach a tipping point, Gladwell (2002) states it only takes a few people who are knowledgeable, socially connected, and persuasive to spread ideas in provocative and straightforward ways that make them stick and resonate with others. Having change champions with different administrative and teaching experiences will provide a variety of perspectives when engaging in shared leadership for change. As an adaptive leader, the principal often collaborates with all members of the school community, leading strategically and enabling people to stretch beyond the status quo (Heifetz & Linsky, 2017). The Assistant Principal, like the principal, has a direct line of sight to strategic outcomes and, as a half-time teacher, also has a personalized understanding of the current reality of teachers. The Teacher Coach also teaches half-time

in the classroom and has an additional leadership role. Given their frequent interactions with teachers in a non-evaluative, supportive role, the Teacher Coach has the potential to be a highly influential change agent. Finally, as part of the Leadership Team, teacher representatives would provide their perspective in leadership decisions. They would have a stronger voice and personalized understanding of the change plan, acting as change agents with other teachers. Cawsey et al. (2016) explain how trusted colleagues and their predispositions can be particularly influential in moving people forward during the change process. Along with the Leadership Team, the teacher representative could help to communicate the need for change and support colleagues throughout the process.

The aim of this change plan is for teachers to become the primary drivers of change, and their changing role as change champions is formalized through the formation of a Guiding Coalition. The Guiding Coalition are the early adopters of the change by being the first teachers to engage in using the CSTAP protocol. As they implement short-term plans, teachers in the Guiding Coalition support one another through shared expertise or by connecting to their different professional networks and resources. The Guiding Coalition uses the CSTAP protocol to focus efforts toward the strategic vision, empower teachers to lead strategic initiatives, and to foster continuous improvement within changing school contexts. Both the Guiding Coalition and the leadership team learn to work together, "in a way that allows for the hierarchy side and the network side to stay strategically aligned, to maintain high levels of reliability and efficiency, and to develop a whole new capacity for speed and agility" (Kotter, 2014, p. 30). This increases the coherence amongst the leaders of change enabled by frequent interactions and consideration for varied perspectives.

Required resources. As outlined in Appendix E, during each phase of the change process, there are resources needed, some that are readily available, and others that may need to be developed. Time for teachers to meet will need to be scheduled within the current calendar and contractual constraints, including the four PD days and after-school meeting times. Teachers will also need to have access to research, training, and new practices to support them in their action planning. Current human resources are available through the Teaching and Learning department who are available to come to schools to meet one-on-one with teachers or teacher teams and to provide formal training through PD sessions. There is also the opportunity to partner with two other small schools that are close to School X. This would expand the NIC and increase teacher collaboration and shared expertise. Formal reviews of the SIP process would be scheduled a minimum of three times in the school year. Technology is available to develop online survey tools and organize evidence of progress, as determined by teachers during the implementation of the change plan. An online version of the CSTAP protocol, including guiding questions and templates, could be developed and made available in paper or electronic format.

Building momentum. Building momentum through short-, medium-, and longterm goals is embedded within the change plan. The outcomes and strategies identified within the SIP serve as the long-term goals of the organization. Through the CSTAP protocol, the long-term vision is divided into FAST goals that are designed to focus efforts and share knowledge in strategic and agile ways. The appreciative approach in the CSTAP protocol and DIG change process quickly shifts the focus from problems to strategic opportunities. Holman (2010) asserts, "the affirmative capability of the whole system enables it to build hope and sustain momentum for ongoing positive change and

high performance" (p. 181). The CSTAP protocol emphasizes agility and speed in implementing SIP strategies through light planning and quick action by taking small steps forward toward the bigger organizational vision. Schmoker (2004) points out achieving and celebrating "small, quick victories in vital areas during short-term improvement cycles have a cumulative effect that builds momentum and contributes to school and system improvement" (p. 427). A creeping commitment also helps to build momentum, albeit more slowly, by providing a systematic, incremental approach, and time to establish needs, clarify the vision, address resistance, and adapt plans (Cawsey et al., 2016). Through frequent action and review cycles, celebrations of small wins accumulate to build energy and commitment toward the long-term vision for change.

In an authentic/adaptive/agile leadership approach, momentum comes from teachers engaged in purposeful and relevant change. When viewed in complex systems, professional learning as interconnected networks of teachers leading school improvement enables increased feelings of empowerment and confidence. Considering this, Wenner and Campbell (2017) conclude that this approach contributes to teaching and learning within the school. Frequent opportunities for teachers to engage in collaborative school change and reflective feedback cycles would gain momentum through the Scrum continuous change cycle. Snyder (2013) explains that feedback loops help to drive or impede the evolution of the system, with negative feedback suppressing change and positive feedback growing the system. The continuous implementation of SIP strategies is about schools "getting better all the time...mastering the change dynamics needed to curate a process of social learning, behavior change, and the creation of organizational routines" (Breakspear, 2017, p. 70). Building momentum is more than finding evidence of

best practices and innovative solutions; it is about developing a culture where people are connected, collaborative, and continuously adapting to meet the challenges and seizing opportunities that arise within our dynamic, ever-changing school contexts.

Implementation risks and mitigation. The preliminary assessment of teacher readiness for change in Chapter One anticipated a high level of dependency on the principal in leading change. The shift to teachers as agents of change is integral to the entire change process and will need to be addressed. During implementation, teachers are empowered to engage in collaborative, shared leadership within the SIP process. To shift from top-down approaches to school change and elicit teacher leadership, the principal will need to be mindful of not exerting positional power and control over others that may constrain innovative and creative strategy formation. Cawsey et al. (2016) caution leaders against the intoxicating impact of hero-worship, stressing the need for leaders to know themselves and to look before they leap.

As a strong instructional leader, the principal will need to be cautious about asserting their expertise power or providing quick solutions when teachers are contemplating their CSTAPs. Instead, engaging in participatory methods where there the leader can be viewed as a content expert is more likely to be successful when introducing change (Lewis, 2019). Positional and expertise power may increase the risk that teachers will not engage in the SIP process, but this will be mitigated by the principal's frequent 'retreat to the balcony' to gain perspective by reflecting on decisions and the impact of interventions (Heifetz & Linsky, 2017). The risk of teachers not engaging in the proposed change plan because of their dependence on the principal will be mitigated through

89

authentic leadership, encouraging teachers to take risks through experimentation and to trust their decisions, knowing successes and failures are valued.

As teachers make sense of their new decision-making power and encouragement to experiment in their practice, they may be fearful they do not have the necessary skills or competencies (Cawsey et al., 2019). Edmondson (2013) asserts innovative cultures embrace paradox, which depends on negotiating tensions "of seeming opposites: play and discipline; high standards and a tolerance for failure; the use of deep experts and boundary-spanning generalists who deeply empathize with customers" (p. 5). This can create discomfort and a need for ambiguity tolerance (Breakspear, 2017) that will be mitigated through adaptive leadership strategies that help others engage in a healthy level of discomfort and regulate distress (Heifetz & Linsky, 2017). The principal will foster a culture of "cooperativeness, learning from errors, seeking feedback about progress and enjoying venturing into the 'pit of not knowing' together with expert help that provides safety nets and, ultimately, ways out of the pit" (Hattie, 2015, p. 27). The urge to suggest simple solutions to complex problems will be resisted. Through the authentic leadership lens, teachers are encouraged to find their core purpose for change that builds on their strengths to support their personal and professional growth as teacher leaders in school and improvement of practice.

The main limitations of this OIP are time, resources, and competing priorities. As outlined in Chapter One, there is limited time for professional collaboration within the current time allocated for school improvement work. For this change strategy to not be an added burden to teachers, the NIC meetings should be implemented into the regular school day or prioritized during the four allotted PD days. Since there are limited

flexibility and long gaps between these PD days, additional human and financial resources would be required for teacher coverage, and to ensure the necessary time for responsive and consistent feedback loops. Creative scheduling, whole-school student activities, and administrative coverage would allow time for NIC meetings. In the day to day reality of school life, there are many competing priorities and time-sensitive demands placed on teachers. The principal's expectations of teachers to develop the collaborative capacity necessary to implement numerous SIP strategies must be considerate of school realities. The change plan is constrained by time, resources, and dynamic, complex school contexts; hence, adaptive responses to teacher needs will need to be considered and adjusted accordingly.

Change Process Monitoring and Evaluation

In the previous sections, the LDSF provides an overview of leadership and strategy formation decisions that might occur during the SIP process. The purpose of the LDSF is to establish where and how principals might more appropriately differentiate their practices. As Katz et al. (2018) describe, the implementation challenge for leaders occurs in the middle space between top-down strategy execution and bottom-up strategy development. The CSTAP protocol provides as a way for teachers to engage more deeply in the focused, student-centered improvement and to empower teachers to make decisions and share in leadership with the principal and their colleagues. Recognizing that implementation is an iterative, evolving process, monitoring and evaluating the changes emerging from the differentiated leadership practices and the teachers' use of the CSTAP protocol, monitoring, and evaluation of SIP goals and strategies are integrated within an Agile School Improvement Process. In contrast to the annual linear strategic management approach to SIP planning, the ASIP demonstrates an iterative, evolving process that has multiple controls for monitoring and evaluating school improvement.

Agile school improvement process (ASIP). School planning is a complex process that can support the principal in managing the change process in a flexible, adaptable way that leads to the envisioned future state of student-centered, collaborative, and impactful school improvement. Scrum, the continuous improvement cycle introduced in Chapter 2, is used to establish an approach to enabling teacher leadership in school improvement. Although Scrum provides increased teacher agency to enable self-sustaining school and practice improvement, it also establishes controls for monitoring short-term and longterm progress of SIP outcomes. To support teachers in visualizing and organizing the information in their CSTAPs, a second agile/adaptive project management method called Kanban supports the implementation and monitoring of school improvement strategies. Kanban and Scrum are commonly blended to manage the complex workflow of large projects (PMI, 2017).

The ASIP provides a detailed overview of the SIP process and demonstrates how the entire process is planned, implemented, monitored, and evaluated (see Figure 4). The ASIP ensures a comprehensive, systemic, and iterative approach to student-centered, collaborative, and impactful school improvement. As Boulton, Allen, and Bowman (2015) state, "complexity thinking suggests that impacts have multiple causes, that inputs can contribute to multiple outcomes, and that impact can be delayed in time and is not linear and incremental" (p. 189). Given the non-linear way in which school improvement occurs, Scrum/Kanban provides a way of monitoring and evaluating dynamic organizational change and allows for a broad range of possible outcomes and measures as

evidence of school improvement. The monitoring and evaluation of the change process occur after teachers have completed the first cycle of their CSTAP. However, teacher NICs may be in different places in the change process, depending on the time commitments they have established in their CSTAPs.

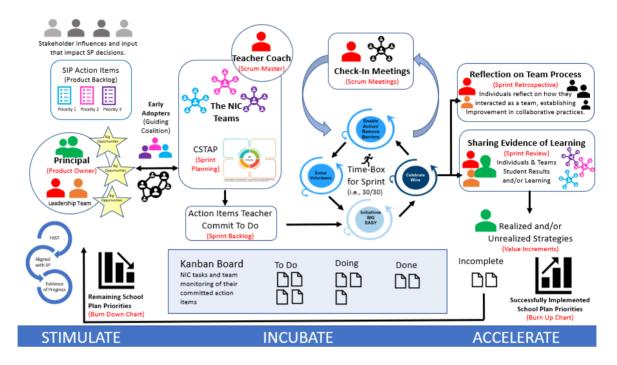


Figure 4. Agile School Improvement Process (Leslie, 2020). Adapted from Scrum and Kanban project management methodologies (PMI, 2017), Kotter (2014), and (DEECD, as cited in Bryk et al., 2011).

The ASIP demonstrates the measurement and control system developed for monitoring and evaluating the proposed changes. It also measures the impact of SIP work concerning students, teachers, and overall SIP progress. When these systems are wellthought-out, the information gleaned from using the tools can provide change agents with valuable insights for how to frame needs and assessments, guide actions and adapt efforts, and provide the necessary evidence that goals of the project are met (Cawsey et al., 2016). Scrum provides a process control framework to clarify roles, establish events to anchor activities, and create artifacts to keep track of the work (Smith, 2018). Kanban, the second

adaptive/agile project management mechanism, "helps the team to further improve its effectiveness by visualizing the flow of work, making impediments easily visible, and allowing flow management by adjusting work in process limits" (PMI, 2017, p. 30). Given the dynamic nature of this project, Scrum helps manage the scope of the change plan through short-term life cycles, and Kanban encourages teachers to engage in self-organizing and provides a visual of what they plan to do, what they are doing, and what is done. To document the number of priorities implemented and associated tasks completed, Scrum uses a tracking system called Burn up or Burn down charts. These identify and validate the work of teachers and to celebrate what has been accomplished. Adaptive leadership practices will be employed to maintain the tensions between the SIP strategic outcomes and the local action of teachers, adapting pressure by increasing the speed and frequency of monitoring. The controlled processes establish pressure on the system, but the conditions are monitored and adjusted as needed to maintain momentum within increasing stress to unproductive levels.

Stakeholder roles and responsibilities. As outlined in the change implementation plan, stakeholder roles and responsibilities are further defined in the ASIP to highlight how the change process and SIP strategies will be monitored and evaluated. The principal, as Product Owner, is influenced by the project teams, governing bodies, stakeholders, and end-users (PMI, 2017). The principal is responsible for developing and maintaining a Product Backlog, which is a list of priorities, requirements, and features the Product Owner deems necessary for meeting project outcomes (Smith, 2018). The Product Backlog is dependent on resources, business changes, and environmental conditions, and is developed from the current SIP. In this change plan, the Product

Backlog is three lists, including the main SIP outcome areas. The corresponding strategies in the currently developed SIP within each outcome area will be listed in the Product Backlog by priority. The Guiding Coalition is included in the Product Backlog discussions, helping to maintain and update the lists as they engage in the SIP process. The principal and the Leadership Team are responsible for ensuring the Burn charts are updated.

The Guiding Coalition and Scrum Master, the Teacher Coach, work together to enlist teachers in the NIC who will engage in future Sprints. Assisted by the principal and the Leadership Team, the NIC will choose a Product Backlog item to focus on and use the CSTAP protocol to adapt the SIP priority or broad-based strategy for the current student context and teacher readiness. As Product Owner, the principal may be present during the early stages of Sprint Planning to guide the process. However, it would be the goal for this process to be self-organizing as teachers become more familiar and confident with the ASIP. Morrison et al. (2019) promote leadership as not residing with the individual leader but as a shared characteristic of a group or team where flexibility and agility are necessary to address complex challenges. Adaptive leaders understand that introducing needed changes can cause people stress and create conflicts, so pacing the work, providing boundaries of authority, and intervening in small and simple ways can help to reduce tensions and enable people to adapt to new circumstances (Heifetz & Linsky, 2017). The principal will ensure teachers feel supported and valued for taking risks and sharing their perspectives and experiences in safe, non-judgmental spaces. Teachers will be encouraged to share both their success and challenges when monitoring and evaluating

the change process, being reminded that learning from mistakes is as important as celebrating successes.

Continuously evolving sprint process. The Sprint begins, with the time-box established during Sprint Planning and identified in the CSTAP. During this stage, the Teacher Coach plays a crucial role as Scrum Master, who supports the team by removing obstacles that may interfere with their meeting commitments (PMI, 2017). As a critical influencer identified in the change process, the Teacher Coach pays close attention to what is happening during the Sprint through frequent check-ins and conversations, engaging the principal and Leadership Team when deemed necessary to provide clarifications or resources such as time and training. Although Daily Scrum is recommended, the school context may not lend itself to this frequency, so a minimum of once per Sprint has been established in the ASIP. The meeting is intended to be short, no more than 15 minutes, with members sharing with the Scrum Master and their team what they are working on and any challenges they are having (Smith, 2018). The Scrum meeting and Sprint process integrate well with Kotter's Accelerate change model, propelling the Sprint Backlog items forward through focused actions, inviting others to help or participate, enabling and removing barriers, and by embedding opportunities for successes to be shared and sustained, building momentum toward the outcome (Kotter, 2014). The Teacher Coach focuses on the SIP priorities and the NIC commitments during the Sprint process to monitor the team's progress, intervening when necessary.

Kanban is a mechanism introduced as part of the Sprint flow to strengthen the team's commitment to the SIP process. Kanban fosters internal accountability and teacher engagement in school improvement through collaborative, self-regulating, and transparent

monitoring of what is being done and identifying impediments that are slowing the process. As illustrated in the ASIP, the Kanban Board is used to visualize the Sprint process and to activate the items in the Sprint Backlog, including team commitments. Kanban provides the mechanism for the team to define further what they plan to do and to keep track of what they are working on and what they have completed. Fullan and Quinn (2016) support this mechanism as they referred to several research studies on school system effectiveness and improvement when they suggested that "internal accountability must precede external accountability if lasting improvement in student achievement is the goal" (p. 110).

After the Sprint concludes, the Teacher Coach updates the Kanban Board, and the Sprint Review and Retrospective occur. The Sprint Review meeting occurs at the end of the Sprint and is organized by the Product Owner, the principal, and attended by all those involved. During this review, the teams share what they have implemented or developed to address the challenge or opportunity identified in Sprint (CSTAP) Planning, providing evidence and examples of progress measures toward the shared outcomes. Although the team may decide when a Sprint Backlog item is done, as indicated on the Kanban Board and shared at the Sprint Review, it is the Product Owner who determines if what has been done is a Value Increment (Smith, 2018). Also, the Sprint Backlog is updated to indicate the progress made toward the SIP priorities. Progress is recorded using a tracking tool like a Burn-Up Chart, and any items considered incomplete are returned to the Product Backlog to be considered in future Sprints.

The Sprint Retrospective also occurs after the Sprint or once the project is complete (Smith, 2018). It is organized by the Teacher Coach and led by the team to "discuss what

went well, what possible changes they could make, and how to make those changes. They also discuss how to make the team more efficient if there were any issues going on" (Smith, 2018, p. 23). The Sprint Retrospective provides an opportunity for the team to self-reflect as individuals and as a collaborative team. To reduce fears of repercussion or professional evaluation that would not be appropriate or encourage risk-taking and formative conversations, the principal would not attend the Sprint Retrospectives. However, the Teacher Coach, whose role is non-evaluative, may share information with the principal, but only if it is to improve the change process.

Measuring and tracking change. Several feedback loops are embedded within the ASIP, to monitor and adapt the change process. Stacey and Griffin (2013) describe feedback as occurring all the time in everyday, ordinary conversations, so leaders need to be not only focused on the system. In addition to stakeholder influences, formal feedback loops are established during the Sprint events and Kanban board to determine school plan progress and to increase teacher interactions and participation through conversations.

It is important that when measuring and tracking change that both success and failures be recognized as necessary for improvement to occur. As previously established during monitoring and evaluating changes, small wins would help to build teacher confidence and momentum to sustain progress toward SIP outcomes. Stacey and Griffin (2013) maintain that feedback archetypes often employ systems theory where feedback loops are thought to increase stability, elicit a sense of disequilibrium, or create chaotic instability. Therefore, it is also important to recognize failures as important measures because they can inform the adaptive leader's decisions for how to intervene. As Heifetz and Linsky (2017) describe, leading on the edge of chaos requires adaptive leaders to

monitor what is happening on the dancefloor and intervene to enable people to move beyond the status quo but not increase pressure too much, so that they become destabilized and unsure of what to do. Given the newness of collaborative school improvement and the low level of teacher readiness, the principal will have to be very mindful of monitoring failures and in maintaining a productive level of stress. Heiftez and Linsky (2017) provide examples of how leaders might do this using the analogy of controlling the heat when feedback is showing little or no change. They suggest raising the temperature by asking tough questions, increasing responsibilities, and discussing tensions/conflicts, and turning down the temperature when people are showing signs of stress by reducing pressures and providing reassurance and encouragement (Heifetz & Linsky, 2017). Measuring successes and failures are essential to school improvement work, and to inform decisions. However, the principal's role in maintaining a productive learning environment is essential for continuous improvement.

Whereas Kotter's (2014) change framework uses a systems perspective to conceptualize organizational change, the accelerate process and development of the network side of the system promotes increased participation and interactions through a dynamic, responsive process. Denning (2013) asserts that Agile methods are becoming a game-changer in many organizations. He contends Agile methods promote positive results and providing a systematic set of management practices "to achieve both disciplined execution and continuous innovation, something that was impossible to accomplish with hierarchical bureaucracy" (p. 5). The ASIP provides a measurement and control system that fosters ongoing monitoring and tracking of progress through a formalized process. It increases teacher interactions and opportunities for collaboratively

making sense of what is working and what is not through frequent feedback loops where responses and new ideas may emerge.

As an extension of the LDSF used in the implementation of the change process that emphasized the adaptive leadership approach to propel both planned, deliberate and developmental, emerging strategies, the ASIP is designed as a continuously evolving push/pull system to strengthen alignment between inputs (SIP outcomes), tools and processes (Scrum/Kanban), and outputs (evidence of progress). Whereas Scrum seeks to control and enable a process through a push system that establishes organizational boundaries and sets expectations, Kanban is a pull system that attracts people to engage in self-organizing action during strategy development. Like CSTAP, Kanban encourages shared leadership that respects peoples' roles and responsibilities and fosters selforganization by allowing the team to determine what action they will take, and to collaboratively manage and limit their workflow (PMI, 2017). Hagel III et al. (2010) assert that pull systems that entice people to become involved and invested in the change process help to harness the potential of innovative practices that will genuinely transform organizations like education, from institutions that learn to learning institutions. The ASIP is a powerful tool that can re-balance the current top-down push approach by increasing the power of agile, adaptive pull processes to attract teachers into voluntarily participating in the change process, increasing teacher autonomy, and enabling a responsive approach to collaborative school improvement.

Plan to Communicate the Need for Change and Change Process

The aim of this OIP is to transform the current SIP process from a yearly planning event to a self-organizing, collaborative approach that teachers adapt and refine in

response to their current contexts and aligned to SIP outcomes. Central to the success of this change plan is teacher engagement in implementing the recommended CSTAP protocol to collaboratively adapt, implement, and monitor the SIP priorities in response to their changing contexts. The ASIP that organizes and monitors the implementation process is designed to be a highly participative process that emphasizes transparency and shared responsibility for planning, implementing, and monitoring goals as determined by the team.

The guiding principles for this communication approach seek to be simple, reflective, and collaborative. Messages will be communicated with clarity and simplicity, to minimize confusion and build an understanding of the proposed changes. Kotter (2012) argues that the time and energy to communicate the vision to others is reduced when the message is focused and clear of jargon information. Given the significant changes proposed in this OIP, a priority is placed on using direct and clear language when communicating about the change. The ASIP incorporates a change process that responds to local contexts and changing needs. Van Ruler and Korver (2019) assert that although a business-focused communication plan helps to coordinate and connect the strategic vision with execution, in changing contexts where strategic development is necessary, a linear step by step approach to communicating change is not likely to be effective. In a reflective communication strategy, using dynamic approaches like the ASIP, plans are frequently reviewed and adapted in response to stakeholder needs and input (Van Ruler & Korver, 2019). It is very flexible and fosters a "natural intensity of cooperation, the genuine urge to get things done in the shortest possible time" (Van Ruler, 2014, p. 10). Using the ASIP that incorporates a dynamic implementation approach, opportunities for

responsive communication are structures within the flow of the framework. Finally, shared communication invites the input and participation of stakeholders. Donahoo and Katz (2020) assert that school improvement "depends on the collective belief that the teaching faculty has what it takes to improve student achievement; therefore, teams must be purposeful in their efforts to instill a sense of collective efficacy among all educators in schools and districts" (p. 88). Therefore, communication will be a combination of the many voices of stakeholders with a focus on the strategic vision of the organization.

Raising awareness of the need for change. To engage teachers in the SIP process, the principal will need to establish a compelling reason for the change. In Chapter 1, the teachers' readiness for change findings anticipate change readiness to be low due to past change experience factors. To help teachers let go of limiting current practices, including their dependency on the leader to be the driver of change, a raised level of urgency is necessary to destabilize the status quo (Kotter & Cohen, 2002). Kotter and Cohen (2002) assert "people change what they do less because they are given analysis that shifts their thinking than because they are shown a truth that influences their feelings" (p. 1). To reduce resistance and promote change, Cawsey et al. (2016) explain that stakeholders move through a change continuum, progressing through stages of awareness, interest, participation, and supporting the change. Vital for establishing the need for change is the development of a vision for change that articulates the short-term future can be realized (Cawsey et al., 2016). The challenge for leaders is to communicate a change vision that aims high enough to resonate and motivate people to move beyond the current state, but not so high that it fails to connect to the practical aspects of the change (Cawsey et al., 2016). Drawing from Kotter's (2014) Accelerate change model, the change vision focuses on the Big Opportunity that highlights both the practical issues and emotionally compelling opportunities to elicit teacher interest and participation in engaging in the proposed changes.

Shared vision and goals. A collaborative culture is fostered when a leader communicates plans and adjustments to the school, and the "community owns the plan and needs to help revise, update, and help with the implementation. Communication creates a feeling of transparency, which, in turn, builds trust" (Fullan & Kirtman, 2019, p. 29). The ASIP is a transparent process with clear communication of SIP outcomes. In contrast to the current SIP that is accessible only to the principal because of its long length and extensive content, the ASIP is highly visible and allows for teachers to develop a strong understanding of priorities and to have a voice and involvement in the change.

The principal will draft the initial change vision based on the essential elements in a change message (Armenakis et al., 2000). This includes information about (1) discrepancy—what the gap between the current and future state is, and why it is necessary to address; (2) appropriateness—how this change addresses the discrepancy; (3) self-efficacy—members' belief that they are capable; (4); principal support—leadership commitment to resource support; and (5) personal valence—member benefit or reward (Armenakis et al., 2000, pp. 103-104). Current gaps in the SIP process include rational needs for change like the lack of real-time data to inform decisions and evidence of school improvement, in addition to the emotionally compelling need for change like increasing teacher autonomy and flexibility to adapt strategies for current contexts. When developing the CSTAPs, teachers will be encouraged to start with what they currently

know to build on their current strengths and passions when implementing the changes. The CSTAP protocol does not start with teachers learning about school improvement; it provides teachers with a starting point for collaborative conversations and innovative actions, with the goal of getting them excited to try something new and to inspire them to engage in purposeful school improvement and professional learning through continuous reflections with other teachers. Principal support will be ongoing and communicated throughout the ASIP during informal conversations, as suggested by the Teacher Coach, and through an adaptive leadership approach that focuses on intervening in ways that help others adapt to the challenges they face (Heifetz & Linsky, 2017). Once drafted, the principal would meet with the Leadership Team to share the change vision and to solicit their feedback before meeting with teachers.

Compelling teachers through communication of new roles. The communication message will be personalized for unique stakeholder needs. For example, the Leadership Team and Teacher Coach will have additional responsibilities that will need to be communicated and clarified. In addition to the principal, the Leadership Team will include the Assistant Principal, Teacher Coach, and teachers. These people will need to have a clear understanding of the change message and contribute to the review and revision of it. In their leadership role, the Leadership Team will need to be consistent in communicating the change vision and responding to teacher questions and concerns. In addition to formal meetings at the end of each review/reset cycle identified in the implementation plan, informal communication amongst the members to clarify thinking and actions will be encouraged. The Teacher Coach has an essential role, as Scrum Master, who communicates regularly with the teacher teams to ensure they are moving

forward in their commitments by focusing efforts and by formalizing a mid-point checkin with the team during each Sprint cycle. Since this is a new role, clarifications about the Scrum Master role will need to be clarified to communicate expectations to the Teacher Coach and to provide clarity about the way teachers will be supported in this change process. Communication about initial training will be formalized through a regular schedule, and ongoing principal support and collaboration with the Teacher Coach will address emergent needs and adjust the frequency of training, as necessary.

Communicating the DIG change process. In this OIP, the DIG change process is used to lead people through the implementation of a dynamic, cyclical change process. As previously described, the DIG change framework (see Figure 1) integrates the Triple Diamond Innovation change model (DEECD, as cited in Bryk et al., 2011) and Kotter's (2014) Accelerate change model. Integrated within these three phases of TDI are Kotter's (2014) eight accelerator processes that build energy and commitment for school improvement initiatives. Cawsey et al. (2016) assert that the communication message and methods vary depending on the different phases of change. During the Stimulate phase, the communication plan will include information about the need for change to establish a sense of urgency and compelling purpose for teachers to participate as leaders. The teachers who respond to the invitation to participate will become part of the Leadership Team and Guiding Coalition. Lewis (2019) states that increased participation and decision-making power can help to reduce resistance to change. Kotter (2014) suggests that leaders should invite people into the change in different ways, like email, face-toface, and at meetings. He asserts the communication should be invitational and shared with a broad number of people to gain the critical number to move the change forward.

Given the limited number of teachers at School X, the principal will include all teachers in communications related to participation in the change process.

Stimulate phase. During the Stimulate phase, the project kickoff will be held by the Leadership Team with all teachers. The Leadership Team, led by the principal, will communicate the change vision by presenting the current SIP document. This will emphasize the challenge of implementing numerous broadly defined strategies. Then, the Leadership Team will share the change vision to communicate the practical issues further. Opportunities for a brief teacher reflection about the current process to gain further understanding of their readiness will be provided through open discussion and table talk. The Leadership Team would then invite them to share some ideas on how to improve this process by sharing the envisioned future state. The kickoff would end with teachers having a sense of what changes are needed and a contribution to the changes to come. After the kickoff, the Leadership Team would meet to review teachers' input and revise the change message to respond to any concerns and new ideas. At a follow-up meeting with teachers, the Leadership Team would present the change vision and a high-level view of the proposed changes, CSTAP protocol, and the ASIP. Where appropriate, connections to previous teacher feedback, solicited during the kickoff meeting, would be included in the message.

Incubate phase. In the second phase, the Incubate phase, the first cycle of change will have occurred. The teachers who were early adopters would have developed a CSTAP and experimented with some of their innovative ideas for school improvement within their practices. The principal would have also supported them through the ASIP that clarifies the implementation and monitoring of the CSTAP activities and evidence of

progress. The communication that takes place during this phase includes the co-creation of the first Sprint and shared commitment for action. The timeframe and audience for these communications are variable and depend on the SIP strategy being implemented and the short-term action plans committed to. For example, two teachers may have committed to an initiative for a social justice project over a specified period. At the same time, another teacher team may be focusing on initiatives related to student wellness. Each time a teacher or teacher team engages in a Sprint, the following communication protocols occur. First, teachers share their CSTAP commitments publicly by posting them on the Kanban board. This Kanban board will be in the teacher staff room where teacher meetings occur and provide a visible reminder of what is happening throughout the change process. Frequent face to face meetings between the Teacher Coach and the teacher team provide additional opportunities to remove barriers and enable progress. The Kanban board will continue to occur as the Sprint progresses, to provide visual, nonverbal updates to other NICs.

Given the emotional volatility and high levels of disorientation during this transition phase (Bridges, 2016), the principal will use adaptive leadership behaviors to assess the situation and to gain an understanding of teachers' perspectives and to learn from their fears (Heifetz & Linsky, 2017). To foster agility, Breakspear (2017) recommends that leaders to work with their teams "to determine the smallest number of changes necessary to have the desired impact on learning" (p. 70). As supported by authentic leadership practices, the principal would focus on establishing relational trust and safety to encourage risk-taking. Edmondson (2019) asserts change participants are more likely to feel safe to participate when they are expected to make small changes that stretch their

current practices instead of focusing solely on the long-term goals. Recognizing the signs of distress and communicating appropriate responses will help to mobilize people if they get stalled so that change is enabled, and barriers are removed. With the aim to encourage and support teachers to be creative and innovative during this phase, the principal will limit formal communication and exercise a listening, observer role.

Accelerate phase. In the third phase, Accelerate, the Sprint Review and Retrospective meetings occur where teams share the results and reflections from their Sprints. The Sprint Review meetings and guiding questions communicate the impact or value the change had on progress toward the SIP outcome, and for the learning of the teachers. Given the range of teacher knowledge and talents, it will be important that teachers be reminded of how their work is contributing to the success of the SIP process, to build capacity for emerging leaders, and continued buy-in for sustaining and instituting change through changed belief and actions. Successes and failures will be shared with all teachers and celebrated. Small wins will be acknowledged through team conversations and at school events such as student assemblies or parent gatherings, as appropriate. For example, after a social justice project, teachers will be invited to share what worked and what did not, and decisions for broader communication and celebration will be determined. The Retrospectives also occur after the Sprint, but only the team and Teacher Coach are involved. They reflect on how they worked together and record any lessons learned that might be improved in future Sprints. The team determines if these reflections are shared with other NICs or with the Leadership Team.

The communication plan presented in this section is envisioned to be adjusted based on new understandings and stakeholder needs that arise throughout the change process.

As issues arise, the principal and Leadership Team will consider the emotional side of change and be empathetic and encouraging to teachers who may be struggling. Communication provides clarity through reflective responses and shared experiences. A balance between formal communication that disseminates information and solicits input from teachers throughout the change process will be emphasized during the early cycles. As trust and transparency increases, the conditions to support increased teacher participation, collective autonomy, and power to make evidence-informed school improvement decisions will be fostered. The DIG change framework and implementation of the CSTAP protocol using the ASIP to manage and monitor changes provide a consistent communication plan that focuses efforts on milestones and propel change forward through frequent feedback loops. Formal communication structures embedded within the ASIP provide consistent communication for determining success and to inform future team decisions.

Next Steps and Future Considerations

There are several next steps and considerations for this OIP, given the shifting educational landscape and my changing role. First, since the plan presented has not been formally implemented, the strategies provided have not been tested, so continued refinement will be necessary. As Hargreaves (1995) points out, even with the shift to selfmanagement schools and developmental planning in the early 1990s, there were several weaknesses, including lack of baseline data, externally mandated expectations, too many priorities, and vague goals. The concept of developmental SIPs is not new, and even though this OIP addresses many of the challenges described in developmental planning, close attention to the impact it has in shifting teacher engagement in self-directed and impactful school improvement will need to be monitored. Given the possible shift toward a public assurance model for school improvement, there may also need to be additional changes made depending on these new requirements.

Second, since Scrum and Kanban are not commonly used approaches in education, their terms will need to be changed to relate better to educational contexts. For example, instead of referring to the Teacher Coach as a Scrum Master, the ASIP should be updated to include only educational language and role descriptors. Although I have included these updates on the ASIP diagram, I decided to maintain the description of the process using the formal Scrum/Kanban terms to ensure integrity with the adaptive/agile project management terminology. With increased complexity and pace of change in education, I believe we need to draw upon the experiences of other knowledge-centered industries to find more effective and efficient ways to lead others.

Third, I would like to explore the other two solutions presented in this OIP. The strategy map may help to synthesize the various government and School District school performance measures and help to focus on specific future organizational and school improvement strategies. In my new role, I am more closely involved in providing input to the School District's SIP, so this may help me to better understand what measures would be considered within each of the SIP priority areas. The other proposed solution suggests a digital school portfolio to capture real-time evidence of school improvement and innovative practices. I believe that further exploration into the use of digital project management tools and school data dashboards could help principals and teachers in making timely school improvement decisions. Agile strategy development through doing and learning emphasizes quick action instead of wasting time on data analysis that may

have limited impact in addressing adaptive challenges where it is difficult to predict why gaps exist (Morrison et al., 2019). Although change leadership requires a deeper understanding of the underlying barriers to change and effective approaches and practices for successfully engaging others, technology may help to organize and manage the complex SIP process and various outcomes and strategies.

Fourth, to contribute to system-wide change, Fullan and Quinn (2016) require that school leaders network with others in the system to understand the policy and accountability implications on school improvement. In my involvement with the ATA, I have the opportunity to engage in an Agile School Network with other school leaders in the province and internationally, through an action research project on agile school leadership. With the current global pandemic, we face unimaginable challenges and changes in our daily lives and leadership practices. Schools have changed overnight to an online and uncertain school environment. There will be a need to stay connected to broader leadership strategies and other professional leadership networks to assess the implications of education's accountability policies within our uncertain and changing realities.

Chapter Summary and Conclusion

In this chapter, the change implementation, monitoring, and communication plan is discussed. In the change implementation plan, priorities are identified and stakeholder perspectives are addressed. The vital role of change champions emphasizes the participation of the Teacher Coach and teachers who engage in the change plan as the first Guiding Coalition, the first team to take on shared leadership for a SIP outcome area that requires learning and experimenting with new ideas for school improvement. The

proposed alternative to current SIP implementation process, the ASIP is illustrated, highlighting Scrum and Kanban project management methods for enabling developmental, continuous learning processes. Resources to support teachers are also considered, recognizing the importance of reducing barriers that may impede progress (Kotter, 2014). The process is aligned with the Dynamic Innovation Generative change framework to provide the background change leadership strategies employed during the implementation of the change. A plan for communicating the change includes raising awareness of the need for change and developing a shared vision and goals through the agile learning conversations, as guided by the CSTAP protocol which is recommended for teachers to engage in implementing the SIPs strategies within a change school context.

Finally, looking back at the last three years, this scholarly leadership journey has been an exciting and humbling experience. It has pushed me as a person and leader, deepening my understanding and appreciation of the complexities of change leadership and engaging others in dynamic school improvement. As Poindexter (2017) writes, "The thing about chaos, is that while it disturbs us, it too, forces our hearts to roar in a way we secretly find magnificent" (n.p.). As I move into a principal district role, I enter this uncertain leadership space with an open heart, inquiring mind, and steady hands. I am nervous, but feeling prepared to lead and learn alongside others. As we navigate the future challenges in the complex, dynamic education system, I contend we must strive to seize opportunities for enabling student-centered, collaborative, and impactful schools.

References

Agile Alliance. (2019). *Manifesto for Agile Software Development*. Retrieved from https://www.agilealliance.org/agile101/the-agile-manifesto/

Alberta Education. (2010). *Accountability pillar fact sheet*. Retrieved from https://open.alberta.ca/publications/6565964

Alberta Education (2015) Alberta Teacher Workload Study. Retrieved from https://www.teachers.ab.ca/SiteCollectionDocuments/ATA/ATA%20News/Teacher %20Workload%20Study%20Final%20Report%20December%202015.pdf

- Alberta Education. (2017) *Leadership Quality Standards*. Retrieved from https://education.alberta.ca/media/3739621/standardsdoc-lqs-_fa-web-2018-01-17.pdf
- Alberta Education. (2019). Policy and Requirements for School Board Planning and Results Reporting. Retrieved from_https://open.alberta.ca/publications/1923-0257
- Alberta Education. (2020a). *Professional practice standards*. Retrieved from https://www.alberta.ca/professional-practice-standards.aspx
- Alberta Education. (2020b). *New K to 12 education funding model*. Retrieved from https://www.alberta.ca/k-to-12-education-funding-model.aspx

Alberta Teachers' Association. (2008). *Code of professional conduct*. Retrieved from https://www.teachers.ab.ca/SiteCollectionDocuments/ATA/Publications/Teachers-as-Professionals/IM-4E%20Code%20of%20Professional%20Conduct.pdf

Alberta Teachers' Association. (2017). Agile schools' network: *Teacher-led innovation for better learning outcomes*. Retrieved from

https://static1.squarespace.com/static/54d4870ee4b08e57d715d395/t/592cc0de197a ea28581e37b1/1496105198670/Report+ATA_2017+UPDATED+30.5.17.pdf

- Apple, M. W. (2004). Creating difference: Neo-liberalism, neo-conservatism and the politics of educational reform. *Educational Policy*, *18*(1), 12-44.
- Appova, A., & Arbaugh, F. (2018). Teachers' motivation to learn: Implications for supporting professional growth. *Professional Development in Education*, 44(1), 5-21.
- Armenakis, A., Harris, S., & Feild, S. (2000). Making change permanent. A model for institutionalizing change interventions. *Research in Organizational Change and Development*, 41(2), 97-128. doi: 10.1016/S0897-3016(99)12005-6
- Armitage, H., & Scholey, C. (2007). Using strategy maps to drive performance. Management Accounting Magazine, 80(9). Retrieved from http://www.cimaglobal.com/documents/importeddocuments/tech_mag_strategy_ma pping_march07.pdf
- Baetz, M. C., & Bart, C. K. (1996). Developing mission statements which work. *Long Range Planning*, 29(4), 526-533.
- Bernhardt, V. (2018). Toward system wide change. *Educational Leadership*, 73(3), 56-61.
- Bolman, L., & Deal, T. (2008). *Reframing organizations. Artistry, choice, & leadership* (4th ed.). San Francisco, CA: Jossey-Bass.
- Boulton, J. G., Allen, P. M., & Bowman, C. (2015). *Embracing complexity: Strategic perspectives for an age of turbulence*. Oxford, UK: Oxford University Press.

Bowen, C., Bessette, H., & Cham, T. C. (2006). Including ethics in the study of educational leadership. *Journal of College and Character*, 7(7).

Breakspear, S. (2017). Embracing agile leadership for learning – How leaders can create impact despite growing complexity. *Australian Educational Leader*, *39*(3), pp. 68-71. https://simonbreakspear.com/wp-content/uploads/2017/01/Agile-Implementation-for-Learning.pdf

- Breakspear, S. (2020). *Learning sprints. Enhancing teacher expertise*. Retrieved from https://learningsprints.com/
- Breiter, A., & Light, D. (2006). Data for school improvement: Factors for designing effective information systems to support decision-making in schools. *Journal of Educational Technology & Society*, 9(3), 206-217.
- Bridges, W. (2016). *Managing transitions. Making the most of change* [Kindle PC version]. Retrieved from Amazon.ca

Bryk, A. S., Gomez, L. M., & Grunow, A. (2011). Getting ideas into action: Building networked improvement communities in education. In M. T. Hallinan (Ed.), *Frontiers in sociology of education* (pp. 127-162). Dordrecht, NL: Springer, Dordrecht.

- Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to improve: How America's schools can get better at getting better*. Cambridge, Massachusetts: Harvard Education Press.
- Bushe, G. R. (2011). Appreciative inquiry: Theory and critique. In D. Boje, B. Burnes, &J. Hassard (Eds.), *The Routledge companion to organizational change* (pp. 87-103).London, UK: Routledge.

- Cawsey, T., Deszca, G., & Ingols, C. (2016). *Organizational change: An action-oriented toolkit* (3rd ed.) [Kindle PC version]. Retrieved from Amazon.ca
- Chia, R. C., & Holt, R. (2009). Strategy without design: The silent efficacy of indirect action [Kindle PC version]. Retrieved from Amazon.ca

Ciulla, J. (2014). *Ethics, the heart of leadership* (3rd ed.). Santa Barbara, CA: Praeger.

clarify. 2020. In Merriam-Webster.com. Retrieved Aug 1, 2020, from https://www.merriam-webster.com/dictionary/clarify

- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). London: Routledge.
- Cooperrider, D., & Whitney, D. (2005). *Appreciative inquiry* [Kindle PC version]. Retrieved from Amazon.ca.
- Crick, R. D., Barr, S., Green, H., & Pedder, D. (2017). Evaluating the wider outcomes of schools: Complex systems modelling for leadership decisioning. *Educational Management Administration & Leadership*, 45(4), 719-743.
- Da'as, R., Schechter, C., & Qadach, M. (2020). School leaders' cognitive complexity:
 impact on the big 5 model and teachers' organizational citizenship behavior. (2020).
 Journal of School Leadership, 30(5) 398-423. doi.org/10.1177/1052684619896535
- Denning, S. (2013). Why Agile can be a game changer for managing continuous innovation in many industries. *Strategy & Leadership*, *41*(2), 5-11.

Dolph, D. A. (2016). To plan or not to plan, that is the question. *Journal of Cases in Educational Leadership*, *19*(3), 100-109. doi:10.1177/1555458916657124

Donohoo, J., & Katz, S. (2020). *Quality implementation: Leveraging collective efficacy to make "what works" actually work* [Kindle PC version]. Retrieved from Amazon.ca Dunaway, D. M., Kim, D., & Szad, E. R. (2012). Perceptions of the purpose and value of the school improvement plan process. *The Educational Forum*, 76(2), 158-173. doi:10.1080/00131725.2011.652490

Earl, L., & Timperley, H. (2015). Evaluative thinking for successful educational innovation. Retrieved from http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=e

n&cote=edu/wkp

- Edmondson, A. (2012). *Teaming. How organizations learn, innovate, and compete in the knowledge economy* [Kindle PC version]. Retrieved from Amazon.ca
- Edmondson, A. (2013). *Teaming to innovate* [Kindle PC version]. Retrieved from Amazon.ca
- Edmondson, A. (2019). *The fearless organization. Creating psychological safety in the workplace for learning, innovation and growth* [Kindle PC version]. Retrieved from Amazon.ca
- Ferguson, E. (2019, May 27). Mood is very down: Principals budget fewer teachers, larger classes for next school year. *[City] Herald*. Retrieved from [removed]
- Fernandez, K. E. (2011). Evaluating school improvement plans and their affect on academic performance. *Educational Policy*, 25(2), 338-367.doi:10.1177/0895904809351693
- Baltacı, A. & Balci, A. (2017). Complexity Leadership: A Theoretical Perspective.
 International Journal of Educational Leadership and Management, 5(1), 30-58. Doi: 10.17583/ijelm.2017.2435

- Fink D., Stoll L. (2005) Educational Change: Easier Said than Done. In: Hargreaves A. (eds) Extending Educational Change. Springer, Dordrecht. doi.org/10.1007/1-4020-4453-4_2
- Fisch, B. (2010). Evaluating organizational quality through narrative: A case for accreditation using the school portfolio. *International Journal of Leadership in Education*, 13(4), 455-487.
- Fong, K. (2006, November). Complexity theory and staff development. In *Asia-Pacific Educational Research Association International Conference*.

Fraser Institute. (2019). School rankings. Retrieved from https://www.compareschoolrankings.org/

- Fullan, M., & Kirtman, L. (2019). Coherent school leadership [Kindle PC version]. Retrieved from Amazon.ca
- Fullan, M., & Quinn, J. (2016). Coherence: The right drivers in action for schools, districts, and systems [Kindle PC version]. Retrieved from Amazon.ca
- Gardner, W., & Carlson, J. (2015). Authentic Leadership. In International Encyclopedia of the Social & Behavioral Sciences (Second Edition, pp. 245-250). https://doi.org/10.1016/B978-0-08-097086-8.22001-1
- George, B. (2015). *Discover your true north* [Kindle PC version]. Retrieved from Amazon.ca
- Gladwell, M. (2002). *The tipping point: How little things can make a big difference* [Kindle PC version]. Retrieved from Amazon.ca
- Gutek, G. (2013). *Philosophical, ideological, and theoretical perspectives on education* (5th ed.). Upper Saddle River, NJ: Pearson Education.

- Hagel, J., & Brown, J., & Davison, L. (2010). The power of pull: How small moves, smartly made, can set big things in motion [Kindle PC version]. Retrieved from Amazon.ca
- Hallinger, P. & Leithwood, K. (1996), Culture and educational administration: A case of finding out what you don't know you don't know, *Journal of Educational Administration*, 34(5), 98-116. https://doi.org/10.1108/09578239610148296
- Hall, P., Childs-Bowen, D., Cunningham-Morris, A., Pajardo, P., & Simeral, A. (2016).
 The principal influence: A framework for developing leadership capacity in principals. ASCD.
- Hargreaves, A. (1995). Self-managing schools and development planning—chaos or control? *School Organisation*, *15*(3), 215-227.
- Hargreaves, A. & Fullan, M. (2012). Professional capital: Transforming teaching in every school [Kindle PC version]. Retrieved from Amazon.ca
- Hargreaves, A., & O'Connor, M. T. (2018). Collaborative professionalism: When teaching together means learning for all [Kindle PC version]. Retrieved from Amazon.ca

Hattie, J. (2015). What works best in education: The politics of collaborative expertise.
London: Pearson. Retrieved from
https://www.pearson.com/content/dam/corporate/global/pearson-dot-com/files/hattie/150526_ExpertiseWEB_V1.pdf

Heifetz, R. A. (1994). *Leadership without easy answers*. Cambridge, MA: Harvard University Press.

- Heifetz, R. & Linsky, M. (2017). *Leadership on the line* [Kindle PC version]. Retrieved from Amazon.ca
- Heifetz, R. A., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership: Tools and tactics for changing your organization and the world*. Boston, MA: Harvard Business Press.
- Holman, P. (2010). *Engaging emergence: Turning upheaval into opportunity* [Kindle PC version]. Retrieved from Amazon.ca
- Holt, D., Bartczak, S., Clark, S., & Trent, M. (2007). The development of an instrument to measure readiness for knowledge management. *Knowledge Management Research & Practice*, 5(2), 75-92. doi.org/10.1057/palgrave.kmrp.8500132
- Honig, M. (2006). Complexity and policy implementation. *New directions in education policy implementation: Confronting complexity*, *63*, 1-25.
- Honig, M. I., & Hatch, T. C. (2004). Crafting coherence: How schools strategically manage multiple, external demands. *Educational Researcher*, *33*(8), 16-30.
- Hursh, D. (2015). *The end of public schools: The corporate reform agenda to privatize education* [Kindle PC version]. Retrieved from Amazon.ca
- James-Ward, C., Fisher, D., Frey, N., & Lapp, D. (2013). Using Data to Focus Instructional Improvement [Kindle PC version]. Retrieved from Amazon.ca
- Kaplan, R. S., & Norton, D. P. (2000). Having trouble with your strategy? Then map it. Focusing your Organization on strategy—with the Balanced Scorecard. Retrieved from https://hbr.org/2000/09/having-trouble-with-your-strategy-then-map-it
- Katz, S., Dack, L., Malloy, J., & Ontario Principals' Council. (2018). The intelligent, responsive leader. Thousand Oaks, CA: Corwin.

- Kegan, R., Kegan, L., & Lahey, L. (2009). Immunity to change: How to overcome it and unlock potential in yourself and your organization. Boston, MA: Harvard Business Press.
- Klopper, C., & Pendergast, D. (2017). Agile leadership and responsive innovation in initial teacher education: An Australian case study. *International Journal for Cross-Disciplinary Subjects in Education*, 8(3), 3160-3168.
- Knapp, M., & Feldman, S. (2012). Managing the intersection of internal and external accountability: Challenge for urban school leadership in the United States. Journal of Educational Administration, 50(5), 666-694. doi.org/10.1108/09578231211249862

401.016/1011100/090/0201211219002

- Kotter, J. (2012). Leading change [Kindle PC version]. Retrieved from Amazon.ca
- Kotter, J. (2014). Accelerate [Kindle PC version]. Retrieved from Amazon.ca
- Kotter, J. P., & Cohen, D. S. (2002). *The heart of change: Real-life stories of how people change their organizations* [Kindle PC version]. Retrieved from Amazon.ca
- Kouzes, J. M., & Posner, B. Z. (2006). *The leadership challenge* (Vol. 3). John Wiley & Sons.
- Letiche, H., Lissack, M., & Schultz, R. (2011). *Coherence in the midst of complexity: Advances in social complexity theory*. Springer.
- Lewin, K. (1951). *Field theory in social science: Selected theoretical papers*. Chicago, IL: University of Chicago Press.
- Lewis, L. (2019). Organizational change: Creating change through strategic communication (2nd ed.). Malden, MA: Wiley Blackwell.

- Lipton, L., & Wellman, B. (2012). Got data? Now what?: Creating and leading cultures of inquiry [Kindle Edition]. Retrieved from Amazon.com.
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership development. In *Positive* organizational scholarship: Foundations of a new discipline (pp.241-258). Berrett-Koehler Publishers.
- MacPhee, C. (2018). Message from the President. *CASS Magazine*. Retrieved from https://o.b5z.net/i/u/10063916/f/CASS_Connection_Spring_2018_Final.pdf
- Mandinach, E. B., & Jimerson, J. B. (2016). Teachers learning how to use data: A synthesis of the issues and what is known. *Teaching and Teacher Education*, 60, 452-457.
- Marsh, J. A., & Farrell, C. C. (2015). How leaders can support teachers with data-driven decision making: A framework for understanding capacity building. *Educational Management Administration & Leadership*, 43(2), 269-289.
 doi:10.1177/1741143214537229
- Martin, K. (2018). *Learner-centered innovation: Spark curiosity, ignite passion, and unleash genius* [Kindle PC version]. Retrieved from Amazon.ca
- Mason, M. (2008). Complexity theory and the philosophy of education. *Educational philosophy and theory*, *40*(1), 4-18.
- McCormick, B., & Davenport, D. (2003). *Shepherd leadership: Wisdom for leaders from Psalm 23*. John Wiley & Sons.
- McEwen, N. (1995). Introduction: Accountability in education in Canada. *Canadian Journal of Education/Revue canadienne de l'éducation*, 1-17.

- McFarland, D., Diehl, D., & Rawlings, D. (2011) Methodological Transactionalism and the Sociology of Education. In M. T. Hallinan (Ed.), *Frontiers in sociology of education* (pp. 127-162). Dordrecht, NL: Springer, Dordrecht.
- Mergel, I., Ganapati, S., & Whitford, A. (2020). Agile: A new way of governing. *Public Administration Review*. doi.org/10.1111/puar.13202
- Miller, J. M. (2006). *The Holy See's teaching on Catholic schools* [Kindle PC version]. Retrieved from Amazon.ca
- Mintrop, R. (2016). *Design-based school improvement* [Kindle PC version]. Retrieved from Amazon.ca
- Mintrop, H., & MacLellan, A. (2002). School improvement plans in elementary and middle schools on probation. *The Elementary School Journal*, *102*(4), 275-300. doi:10.1086/499704
- Mintzberg, H. (1994). The fall and rise of strategic planning. *Harvard Business Review*, 72(1), 107-114. Retrieved from http://search.proquest.com/docview/227818478/
- Mintzberg, H., & Waters, J. (1984). Of strategies, deliberate and emergent. *Strategic Management Journal*, 6(3), 257-272.
- Morrison, K. (2006, November). Complexity theory and education. In *Asia-Pacific Educational Research Association International Conference*.

Morrison, E., Hutcheson, S., Nilsen, E., Fadden, J., & Franklin, N. (2019). Strategic doing: Ten skills for agile leadership [Kindle PC version]. Retrieved from Amazon.ca

- Nadler, D., & Tushman, M. L. (1989). Organizational frame bending: Principles for managing reorientation. *The Academy of Management Executive (1987-1989), 3*(3), 194-204.
- Nicolaides, A., & Mccallum, D. (2013). Inquiry in action for leadership in turbulent times: Exploring the connections between transformative learning and adaptive leadership. *Journal of Transformative Education*, 11(4), 246-260. doi.org/10.1177/1541344614540333
- Northouse, P. (2016). *Leadership: Theory and practice* (7th ed.). Thousand Oaks, CA: Sage Publications.
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change Recipients' Reactions to Organizational Change: A 60-Year Review of Quantitative Studies. *The Journal of Applied Behavioral Science*, 47(4), 461-524. doi.org/10.1177/0021886310396550
- Organisation for Economic Co-operation and Development. (2012). Equity and quality in education: Supporting disadvantaged students and schools. Retrieved from https://www.oecd.org/education/school/50293148.pdf
- Organization for Economic Co-operation and Development. (2013). What is the impact of the economic crisis on public education spending? *Education Indicators in Focus* (Report No. 18). doi.org/10.1787/5jzbb2sprz20-en.
- Padilla, A., Hogan, R., & Kaiser, R. (2007). The toxic triangle: Destructive leaders, susceptible followers, and conducive environments. *The Leadership Quarterly*, *18*(3), 176-194.
- Park, J., Lu, F., & Hedgcock, W. M. (2017). Relative effects of forward and backward planning on goal pursuit. *Psychological Science*, 28(11), 1620-1630.

- Parsons, J., & Beauchamp, L. (2012). Action research: The Alberta initiative for school improvement (AISI) and its implications for teacher education. *Action Researcher in Education*, 3(1), 120-131.
- Peha, S. (2011, June 28). *Agile schools: How technology saves education (just not the way we thought it would) [knowledge and innovation article]*. Retrieved from https://www.infoq.com/articles/agile-schools-education/

Poindexter, C. (2017). Naked human (2nd ed.). Pensacola, FL; Monarch Publishing.

- Project Management Institute, Inc. (2017). A guide to project management body of knowledge (PMBOK® Guide) (6th ed.), and Agile practice guide [Kindle PC version]. Retrieved from Amazon.ca
- Sammut-Bonnici, T., & Paroutis, S. (2013). Developing a dominant logic of strategic innovation. *Management Research Review*, 36(10), 924-938. doi.org/10.1108/MRR-08-2013-0184
- Schildkamp, K., & Kuiper, W. (2010). Data-informed curriculum reform: Which data, what purposes, and promoting and hindering factors. Teaching and Teacher Education, 26(3), 482-496. doi:10.1016/j.tate.2009.06.007
- Schmoker, M. (2004). Tipping point: From feckless reform to substantive instructional improvement. *Phi Delta Kappan*, 85(6), 424-432.

School District. (2016). Administrative procedure [related to school planning and reporting]. Retrieved from [removed]

Schmoker, M. (2016). Leading with focus: Elevating the essentials for school and district improvement. Alexandria, VA: Association for Supervision and Curriculum Development.

School District. (2017). Mission and vision statements. Retrieved from [removed].

School District. (2018). [Strategic results report and plan]. Retrieved from [removed]

Self, D.R. (2007), Organizational change. Overcoming resistance by creating readiness,
 Development and Learning in Organizations, 21(5), 11-13.

doi.org/10.1108/14777280710779427

- Shapiro, J. & Stefkovich, J. (2016). Ethical leadership and decision making in education:
 Applying theoretical perspectives to complex dilemmas (4th ed.). New York, NY:
 Routledge.
- Sinek, S. (2009). Start with why: How great leaders inspire everyone to take action. New York, NY: Penguin.
- Smith, H. (2018). *Scrum. The ultimate beginner's guide to learn and master scrum agile framework* [Kindle PC version]. Retrieved from Amazon.ca
- Snyder, S. (2013). The simple, the complicated, and the complex: Educational reform through the lens of complexity theory (OECD Education Working Paper No. 96). doi.org/10.1787/5k3txnpt1lnr-en
- Stacey, R (2010). Complex responsive processes in organizations. *Learning and knowledge creation* [Kindle PC version]. Retrieved from Amazon.ca
- Stacey, R. D. (2011). Strategic management and organisational dynamics: The challenge of complexity to ways of thinking about organisations (6th ed.). Harlow, UK: Financial Times Prentice Hall.
- Stacey, R., & Griffin, D. (Eds.). (2013). Complexity and the experience of managing in public sector organization [Kindle PC version]. Retrieved from Amazon.ca

- Streifer, P. (2000). School improvement: Finding the time. *NASSP Bulletin*, 84(612), 66-71. doi.org/10.1177/019263650008461211
- stimulate. 2020. In Merriam-Webster.com. Retrieved Aug 1, 2020, from https://www.merriam-webster.com/dictionary/stimulate
- Stringer, P. (2013). Capacity building for school improvement: Revisited [e-book]. doi.org/10.1007/978-94-6209-329-4
- Strunk, K., Marsh, J., Bush-Mecenas, S., & Duque, M. (2016). The best laid plans: An examination of school plan quality and implementation in a school improvement initiative. *Educational Administration Quarterly*, 52(2), 259-309. doi:10.1177/0013161X15616864
- Sull, D., & Sull, C. (2018). With goals, FAST beats SMART. *MIT Sloan Management Review*, 59(4), 1-11. Retrieved from http://search.proquest.com/docview/2074382264/
- Sutherland, J., & Sutherland, J. (2014). Scrum: the art of doing twice the work in half the *time*. New York, NY: Crown Business.
- Timperley, H. (2011). *Realizing the power of professional learning* [Kindle PC version]. Retrieved from Amazon.ca
- Topping, R. (2015). The case for Catholic education: Why parents, teachers, and politicians should reclaim the principles of Catholic pedagogy [Kindle PC version].
 Retrieved from Amazon.ca
- Trello. (2020). *Trello lets you work more collaboratively and get more done*. Retrieved from www.trello.com

- Tuana, N. (2014). An ethical leadership developmental framework. In C. M. Branson, and
 S. J. Gross (Eds.), *Handbook of ethical educational leadership* (pp.153-175). New
 York, NY: Routledge
- VanGronigen, B. & Meyers, C. (2018). Topics and trends in short-cycle planning: Are principals leading school turnaround efforts identifying the right priorities? *Planning & Changing*, 48(1/2), 26-42.
- Van Ruler, B. & Korver, F. (2019). *The communication strategy handbook. Toolkit for creating a winning strategy* [Kindle PC version]. Retrieved from Amazon.ca
- Van Ruler, B. (2014). *Reflective communication scrum. Recipe for accountability*. Retrieved from

https://www.businezz.nl/media/7/9789462364615_inkijkexemplaar.pdf

- Vora, S. (2019). *The power of data storytelling* [Kindle PC version]. Retrieved from Amazon.ca
- Wayman, J. C., & Jimerson, J. B. (2014). Teacher needs for data-related professional learning. *Studies in Educational Evaluation*, 42(2) 25-34.
- Wegrich, K. (2019). The blind spots of collaborative innovation. *Public Management Review*, 21(1), 12-20.
- Weiner B. J. (2009). A theory of organizational readiness for change. Implementation science 4(67). doi.org/10.1186/1748-5908-4-67
- Wenner, J., & Campbell, T. (2017). The Theoretical and Empirical Basis of Teacher Leadership: A Review of the Literature. *Review of Educational Research*, 87(1), 134-171. doi.org/10.3102/0034654316653478

Yamaguchi, R., Avery, L., Cervone., DiMartino, L., & Hall, A., (2017). Adaptive implementation. Navigating the school improvement landscape [Kindle PC version]. Retrieved from Amazon.ca

Appendices

Appendix A: PEST Analysis Framing of the Problem of Practice

A PEST analysis was used to frame the problem of practice. It considered the

broader contextual factors, current research about the perception and effectiveness of

school planning and, it considered the underlying challenges within the current School

District process.

Political Factors	Economic Factors		
 changes to government in past five years (instability/changing priorities) curriculum revisions and shifting focus (concept-based versus basic skills) Policies and Administrative Procedures require reviewing and reporting external measures of standardized, public accountability data (Alberta Education, 2019; School District, 2016). School plans are widely accepted as best practice management tools that meet the political accountability demands for performance, efficiency and fiscal responsibility through data-driven, results- 	 Economic crisis in the province Four-year spending freeze despite enrollment increases. Cut to class size improvement grants Teacher salaries – only 2% increase in 8 years (OECD, 2013) After 2008 financial crisis, almost half of the OECD countries educators experienced frozen/cut pay, fewer high performers may enter the field, demands for training pressure on resources allocated. need efficiency 		
 focused improvement over time (Dunaway et al., 2012; Fernandez, 2011; Mintrop & MacLellan, 2002; Strunk et al., 2016). Mintrop and MacLellan (2002) found school plans only had limited utility for school reform and often, "signaled conformance to external policy and served as levers of compliance" (p. 276). "Multiple mandates from states and districts combine with the allure of grants and innovations, resulting in overload and fragmentation" (Fullan & Quinn, 2016, p.19) Systems-focused education reform and need to personalize it for local contexts (Anson, 1994) In most countries, decisions on how instruction is organised are predominantly taken at the school level, but decisions related to planning and structures, personnel management and resources are more likely to be made at higher levels of authority (OECD, 2018). 	 Social Factors School plans helped to align values and behaviors through a shared vision for improvement (Dunaway et al., 2012; Fernandez, 2011; Strunk et al., 2016) School improvement was perceived in aligning vision, mission and beliefs (Dolph, 2016), teacher collaboration, school culture and ease of implementation in beginning stages of planning (Strunk et al., 2016), foster ongoing evaluation of policy and priorities (Fernandez, 2011). There were mixed perspectives (Strunk, 2016; Mintrop & MacLellan, 2002) and very divergent perspectives (Dunaway et al., 2012) between principals and teachers regarding the meaningfulness of SIPs to guide school improvement affecting the classroom level. Principals felt they were meaningful; while many teachers did not. School plans are "comprehensive to a fault and only loosely tailored to internal faculty capacity perhaps creating a condition of 		

- Conflicting ideals in education policies reenforce dominant models like standardization and consistently de-value alternatives and diversity in curriculum and pedagogy: neoconservative; neo-liberal; management (Apple, 2004).
- "Re-scaling of statehood...[where] policy is becoming less transparent as it is no longer clear where or how policy is made" (Hursh, 2016, p. 38).
- Public ranking of schools based on performance data from achievement tests (Fraser Institute, 2018).
- Shifting governments in power and priorities over past five years from to improving the education system from public accountability by reporting and public assurance that all students' needs are being met in open and transparent ways; curriculum changes toward basics; professional standards (Eggen, 2018).
- ATA argues against standardization because it narrows school and learner choices to matching the testing regime. Datafication narrows teacher teacher's autonomy to ensure the creation of, "good data' based on these regimes (ATA, 2017).
- International trends show need for addressing inequities in education policies. OECD (2012) stated, "equity can go hand-in-hand with quality; and that reducing school failure strengthens individuals' and societies' capacities to respond to recession and contribute to economic growth and social well-being" (p. 3). OECD (2018) "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".

change overload rather than strategic focus" (Dunaway et al., 2012, p. 296).

- Only one study showed a strong relationship (but not causal due to other possible variables) between quality plans and empirical evidence of student improvement in reading and math (Fernandez, 2011).
- School improvement cannot be a one-time event; requires continuous monitoring and flexibility to adjust plans as barriers arise. (Dunaway et al., 2012; Fernandez, 2011).
- Marsh and Farrell (2015) assert using data is an "iterative process that requires critical thinking skills, innovation, a dogged determination to inspect ourselves and our contexts, and to play the role of educational detectives to seek out root contributors to student (and system) underperformance (p. 5).
- Issues of inequities in the data are raised, explaining, "A continued focus is required on the success of diverse learners, particularly those learners who are new to Canada" (School District, 2017, p. 8).

Technological Factors

- Streifer (2000), systems are needed so time can be better spent on engaging in conversations about possible solutions.
- Breiter and Light (2006) say decision making is a complex process and knowing what data is needed is different for different levels of people in the organization and at different times. Principals need data to target resources, plan and align PD; while teachers may need data to target instruction and meet diverse learners needs. Recommend systems be built from the bottom up based on teacher needs and insights.
- An education policy specifically related my PoP is the need to, "stimulate a supportive school climate and environment for learning [that promotes] the use of data information systems for school diagnosis to identify struggling students and factors of learning disruptions" (OECD, 2012, p. 11)

Appendix B: Organizational Change Readiness Assessment

This assessment was completed with Cawsey et al.'s (2016) questionnaire for rating

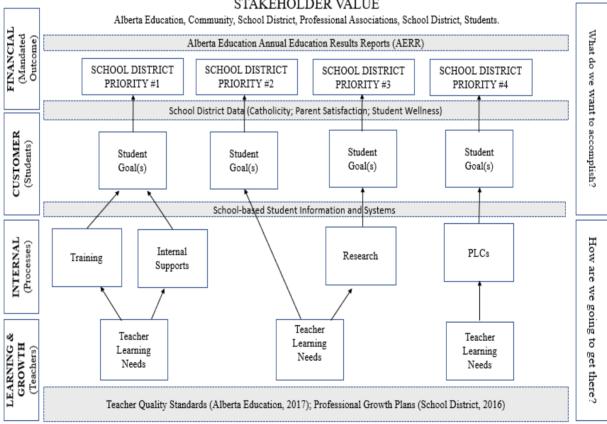
an organization's readiness for organizational change. It was an informal assessment

based on School X's principal	perceptions from	n nast change experiences
oused on sensor respineipur	perceptions non	i pust change experiences.

Readiness Area	Principal Considerations	Score
Previous Change Experiences	 Positive experiences Recent failures Mood Resting on laurels 	-3
Executive Support	 Senior leaders sponsoring the change Clear picture of future Executive success dependence on change Lack of management support 	+6
Credible Leadership and Change Champions	 Trust of senior leaders Credible senior leadership Capacity to attract change agents Middle management linkages capacity Senior leaders view change as appropriate 	+5
Openness to Change	 Organizational scanning mechanisms and intentional focus Focus on root causes inside and outside the organization Turf protection Locked into past strategies Employees can voice concerns Conflicts openly addressed and focused on resolution or suppressed Innovation encouraged Various communication channels Proposed change viewed as appropriate and necessary Employees have energy to undertake the change Employees believe there are resources to support the change 	+6
Rewards for Change	 Innovation and change rewarded Rewards only for short-term successes Punishment for attempting or failing 	0
Measures for Accountability	 Good measures for assessing needs, tracking progress Organizational attend to data that is collected Measurement of customer satisfaction Stewarding of resources to meet predetermined deadlines 	+3
	Total Score Potential range is between -10 and 35 Readiness for change considered at being over 10 points	15

Appendix C: School X Strategy Map Template

The following template provides broad overview of the SIP process. The School X strategy map was developed from a generic example (Armatage & Scholey, 2007) and a balanced scorecard that included the performance measurement data points (Kaplan & Norton, 2000). It includes the components of a strategy map which are the four perspectives, financial, customer, internal, and learning and growth. Also indicated in grey are the formal data points in the current SIP process. The questions on the right side of the map are the two questions commonly used during strategic planning sessions (Kaplan & Morton, 2000; Morrison et al., 2019).



STAKEHOLDER VALUE

Appendix D: Collaborative Short-Term Action Planning (CSTAP) Protocol

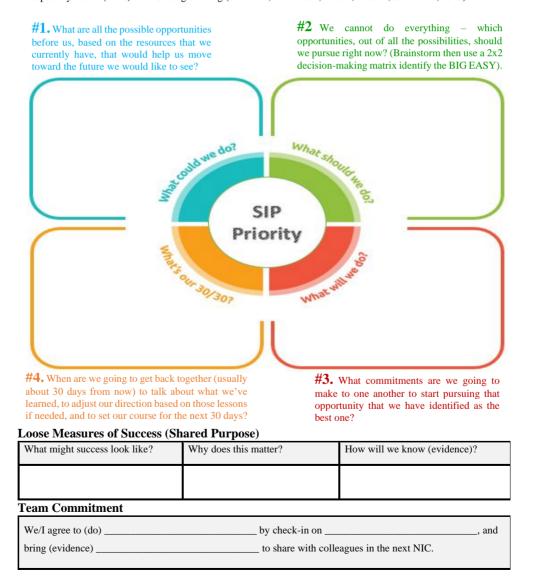
The CSTAP (Leslie, 2020) is a prototyped protocol to guide teachers in agile

learning conversations. It focuses teacher collaboration on SIP priorities and enables quick decisions and action, and continuous improvement. The CSTAP will be refined.

Agile Learning Conversations – CSTAP Protocol

NIC Members:	
SIP Outcome Priority:	Strategy in SIP:

Four Essential Questions to Guide Teacher Conversations for Implementing SIP Strategies *Adapted by Leslie (2020) from Strategic Doing (Morrison, Hutcheson, Nilsen, Fadden, & Frankin, 2019)



Appendix E: Change Implementation Plan and Scheduled Priorities

This change implementation plan provides an overview of the plan to implement

the Collaborative Short-Term Action Planning protocol as part of the Agile School

Improvement Process.

The DIG Change Framework		Priorities based on implementing change in three school plan outcome areas.	Key People	Resources	Timeline
fe	Create a sense of urgency around The Big Opportunity	 Review change readiness and organizational context analysis Identify teacher barriers and challenges (threats) Provide external performance measurement data Outline the three outcome areas and indicators Meet with all teachers to communicate the change plan and protocol for inquiry Invite teachers to choose an area of focus Establish available times for meetings Develop a CSTAP protocol facilitation guide 	Leadership Team Teachers	 Summary documents Accountability data School plan outcomes Key Messages Short-term action planning (STAP) protocol Available meeting times 	September
Stimulate	Build and evolve a guiding coalition	 Prepare for Guiding Coalition (GC) and NIC: Establish the GC and NICs GC reviews available data Brainstorm with GC – outside experts and research School Plan Development Draft school plan, based on GC feedback Elicit school council feedback Future considerations Connect schools 	Leadership Team Guiding Coalition	 Meeting schedules Facilitation guide Available Data and research 	October (PD Day)
	Form a change vision and strategic initiatives	 NIC Planning Cycles (Nov, January, & March) Facilitate CSTAP protocol Document the Big Easy, loose targets, commitments, timelines Data tracking: Solicit teacher input gathering and organizing data 	Leadership Team Guiding Coalition Participating Teachers	 CSTAP protocol guide Guest Teachers (if financially possible) 	NIC Meetings (separate; during day) 1 hour

Incubate	Enlist a volunteer army Enable	 Execute Action Plans November to January / January to March /March to May Review/Reset Cycles (Jan, March, & May) Guiding Coalition meeting and reflections and connections Invite other teachers to engage in process New NIC teams (enable self- organizing) Determine training requirements 	Leadership Team Guiding Coalition Participating Teachers Principal	 Reflection surveys/tools (student impact, teacher learning, team experiences) ISD experts 	Review /Reset Meetings (after school) 1 hour At NIC,
	action by removing barriers	 Determine training requirements and facilitate connections Provide teacher coach embedded PD 	Teacher Coach	 - RSD experts - Research - Time / coverage 	and as needed
	Generate (and celebrate) short-term wins	 Data Tracking Refine documentation process Celebrate /document wins Provide support for challenges/training 	Leadership Team Guiding Coalition Participating Teachers	- Evidence tracking / management system	After Review /Reset Cycle
Accelerate	Sustain acceleration	 NIC Planning Cycles (March & May) Facilitate CSTAP protocol Record Big Easy, loose targets, commitments, timelines 	Leadership Team Teacher Coach	- CSTAP protocol guide	NIC meeting (separate; during day)
	Institute change	 Align action plans to school plan outcomes (Nov, Jan, Mar, May) Align evidence of progress with external measures Encourage continued connections and CSTAP cycles (continuous improvement mindsets) 	Leadership Team Teacher Coach	- External Performance Measures - Time	After each NIC & Review /Reset meeting (1hr)

*Based on the *Triple Diamond Innovation* model (DEECD, as cited in Bryk et al., 2011) and the *Accelerate* (Kotter, 2014).